

**INQUIRY INTO THE IMPLEMENTATION OF THE
RECOMMENDATIONS CONTAINED IN THE NSW CHIEF
SCIENTIST'S INDEPENDENT REVIEW OF COAL SEAM
GAS ACTIVITIES IN NEW SOUTH WALES**

Organisation: Northwest Protection Advocacy

Date Received: 26 October 2019



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21/10/2019

Submission to: To The Chair of the portfolio Committee No.4 Industry.

Inquiring into the implementation of the recommendations contained in the NSW Chief Scientists Independent Review of Coal seam Gas Activities in NSW.

NWPA are a vocal advocate for the Pilliga forest and the people living in the north-west, we have family and friends that have to share the same area with gas and coal mining. Thankyou for the opportunity to present to you this submission on behalf of NWPA.

This crucially important set of recommendations which underpin the NSW Gas Plan lacked substance in the first instance. Since this time there has been a large body of research that has been presented particularly in the area of water and health. Some of it comes from the United States where the Unconventional Gas Industry is further advanced than it is in Australia and further studied. I'd like to take this chance to point out that industry use this information when it suits them ie in order to highlight a perceived industry positive, however, when the evidence presented is negative towards the industry, the response is "it's not like that here".

Quite simply, the gas industry in New South Wales must pause now and reflect on new learnings. We simply cannot conscientiously move forward knowing what we now know in regards to water impacts and health impacts. This submission requests a pause in the assessment process for the Narrabri gas project until a) this inquiry has reported b) all of the initial Chief Scientists recommendations have been implemented and c) until an independent comprehensive Health Impact Assessment has been completed.

Unfortunately, there is a host of concerns. I know that I will miss some important facts and would like to outline that this submission supports the expert submission made by Lock the Gate and that of Dr. Gerylann McCarron along with long term gas field resident Tony Pickard.





























The LNP vocally bought back licences, reducing the amount of land available for CSG mining to 7% of the state but so far have failed to implement their NSW Gas Plan. The Hunter, Northern Rivers and Sydney got buy backs, or no go zones, but there are no areas in the North West that are protected? How is this an equitable system?

Over 5 years ago on 30 September 2014, NSW Chief Scientist and Engineer, Professor Mary O'Kane, published her Final Report of the Independent Review of Coal Seam Gas (CSG) Activities in NSW, including 16 recommendations to the NSW Government.

Implementing the Final Report of the Chief Scientist and Engineer's Independent Review of Coal Seam Gas Activities in NSW [October 2015, some 4 years ago](#), this implementation report details: "In total, seven of the 16 recommendations have been completed. An additional three recommendations will be implemented by mid-2016, and good progress has been made against the remaining six recommendations."

TOR (a): The status of the implementation of the recommendations today 21/10/19

Here is a twitter conversation conducted with Kylie Hargreaves, then Deputy Secretary of Department of Planning & Environment on 07/09/16.

- **Jo Holden** @JoJamesHolden · 7 Sep 2016
@IndustryKylie Q2. How many of the recommendations made have actually been implemented 2 years on from that report? #CSG
-  2    
- **Kylie Hargreaves** @IndustryKylie · 7 Sep 2016
@JoJamesHolden also Rec 10 (environmental database which can be built on over time) is due for released shortly ✓ resourcesandenergy.nsw.gov.au/miners-and-exp...
-  1   
- **Jo Holden** @JoJamesHolden · 7 Sep 2016
@IndustryKylie Thankyou, so 10 of the 16 recommendations 2 years on from the final report have not yet been completed?
-  1    
- **Kylie Hargreaves** @IndustryKylie · 7 Sep 2016
@JoJamesHolden Hi Jo - no its more like 10 of 16 are complete, with some like the portal due soon & others still WIP.
-  2   
- **Jo Holden** @JoJamesHolden · 10h
@IndustryKylie Hi Kylie, how are the rec's going. Last check was 10/16. Are the new water monitoring bores #Pilliga part of Rec 10? Thanks
-     



Kylie Hargreaves
@IndustryKylie



Following

@JoJamesHolden Hi Jo - Rec 10 was about the design & release of an environmental data portal - SEED. ✓ resourcesandenergy.nsw.gov.au/miners-and-exp...

11:09 AM - 11 Jan 2017



1



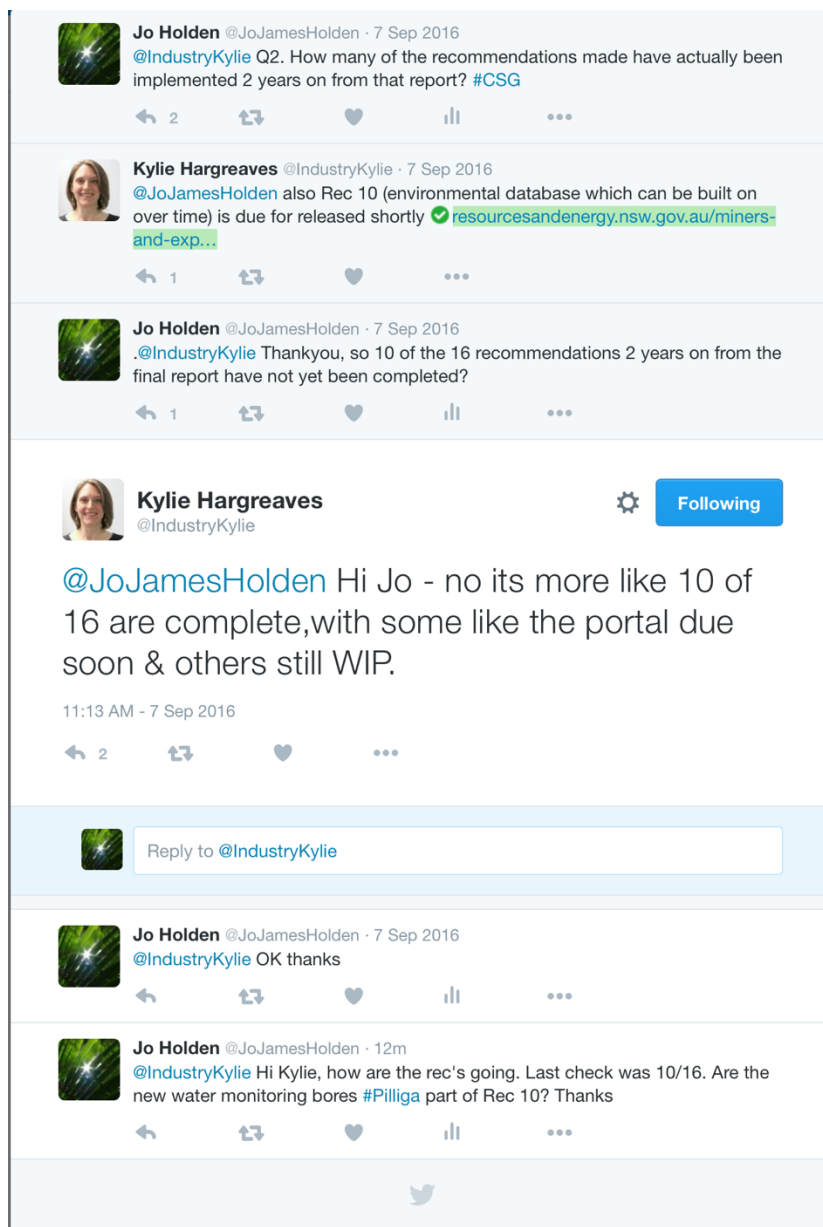
Reply to @IndustryKylie



Jo Holden @JoJamesHolden · 4h

@IndustryKylie thx, so how many recs now complete? & WaterMB's - what rec is that part of?





In October 2017 Lock the Gate produced a [scorecard](#) detailing where the NSW Government was up to in implementing the NSW Recommendations (some of which do cross over with the later Bender Inquiry Interim Report). It does appear that not much progress was made after this time.

This submission will not detail exactly which recommendations have not been fulfilled as plenty of other submissions will do this but we would like to point out that at this time in 2017 we had entered the assessment process and the Santos EIS exhibition period had closed. The community was led to believe by the current NSW government that the recommendations that would underpin the NSW Gas Plan were in place and a given.

Transcript [here](#): P34: Mr JOHN BARILARO: Fourteen of the 16 recommendations made by the Chief Scientist and Engineer are complete or complete and ongoing. The outstanding recommendations are recommendation 4 led by the Environment Protection Authority that the full cost to the Government of the regulation and support of the CSG industry be paid by industry and be reflected in the budget, and recommendation 9 led by the EPA, that the Government develop an appropriate insurance— The Hon. JOHN GRAHAM: When will those two recommendations be implemented? Mr JOHN BARILARO: The Government passed—sorry, what was the question? The Hon. JOHN GRAHAM: When will those two recommendations be implemented? Mr JOHN BARILARO: I think that is a question you might want to ask the public service this afternoon.

Then p45: Mr BETTS: Correct. Yes. I stand to be corrected, but my understanding is that the Government has accepted all the recommendations from the Chief Scientist and Engineer and has implemented all but two of them, which are in their final stages of being implemented, or are certainly in a very advanced stage. Perhaps part of the reason that it did not loom larger in the Deputy Premier's thinking this morning was that it has been adopted and we have kind of moved on.

Moved on? How can you “move on” when key recommendations remain incomplete?

Several key recommendations still to be implemented and the Deputy Premier John Barilaro does not intend to create the state-specific Standing Expert Body as recommended by the Chief Scientist.

TOR (c): whether any other inquiry findings or other major reports relating to unconventional gas in Australia or the east coast gas market published since the release of the Chief Scientists are relevant to the suitability or effectiveness of the Chief Scientists recommendations

There have been several new reports and findings that have been brought to light over the 5 years since the Chief Scientist reported her findings and recommendations.

Select Committee on Unconventional Gas Mining

Senator Glenn Lazarus chaired an [enquiry – Select Committee on Unconventional Gas Mining](#), commonly called the Bender Inquiry (after the late George Bender who suicided after relentless gas company pressure). This Interim Report was delivered in May 2016, it highlighted at 1.13: “A thorough investigation of the human health effects of coal seam gas mining, hydraulic fracturing and underground coal gasification must occur, particularly around the Hopeland area of Queensland.”

It handed down these recommendations, NWPA believe that these should now be integrated into the NSW framework.

Recommendation 1 1.34 That the Commonwealth Government works with states and territories to develop a national strategy to manage the conduct of Unconventional Gas Mining in Australia.

Recommendation 2 1.35 That the Commonwealth Government appoint an Unconventional Gas Mining Commissioner to oversee the conduct, management, regulation and compliance of the entire industry on a national basis.

Recommendation 3 1.36 That the Commonwealth Government appoint a Resources Ombudsman to support Australians affected by mining, in particular coal seam gas mining, and to provide an appropriate and independent dispute resolution service to those affected by resource projects.

Recommendation 4 1.37 That the Commonwealth Government establish a community legal service to provide landholders and others affected by the resource industry and unconventional gas mining with access to free legal advice.

Recommendation 5 1.38 That the Commonwealth Government establish a dedicated health and medical service inclusive of mobile services to ensure that people affected by resource projects, and in particular, unconventional gas mining projects, have access to appropriate and timely health services.

Recommendation 6 1.39 That the Commonwealth Government makes resourcing available to the National Health and Medical Research Council to undertake long-term studies into the potential health effects of the unconventional gas mining industry.

Recommendation 7 1.40 That the Commonwealth Government establish an independent national testing and research centre to undertake testing associated with the resource sector, in particular the unconventional gas mining sector.

Recommendation 8 1.41 That the Commonwealth Government establish a national chemical register that ensures a transparent chemical disclosure regime be made publicly available, in order to provide landholders and local residents with information that is relevant to them.

Recommendation 9 1.42 That the Commonwealth, state and territory governments commit to improving the level of independent scientific research related to unconventional gas mining and its impacts, and that this research be published.

Recommendation 10 1.43 That the Commonwealth Government work with states and territories to cease approvals for any further unconventional gas mining projects across the country or the expansion of, or installation of further wells on, any existing unconventional gas mining projects.

Recommendation 11 1.44 That the Commonwealth Government work with states and territories to establish an independent and dedicated national Resource Sector Workplace Safety group to investigate the health, safety, wellbeing and welfare of Australian workers in the resource sector. The group should investigate all aspects of the health and safety of workers including the management of occupational health and safety on sites, mental and physical wellbeing, exposure to chemicals and other forms of exposure, the management of incidents, compliance, reporting and support provided to workers and their families.

Recommendation 12 1.45 That the Commonwealth Government work with states and territories to establish Trust Fund requirements for all resource companies operating in Australia. These would include:

- A Worker Protection Trust Fund

This Trust Fund would be established by the Commonwealth Government and would require, in collaboration with all states and territories, for all resource companies operating in Australia to put monies into this trust fund upfront to ensure that should the company go broke, restructure, or encounter financial difficulty, that all Australian workers and Australian sub-contractors are paid in full and receive their entitlements;

- A Landholder Protection Trust Fund

This Trust Fund would be established by the Commonwealth Government and would require, in collaboration with all states and territories, for all resource companies operating in Australia to put monies into this trust fund up front to ensure that any damages sustained by Australian landholders as a result, whether directly or indirectly of projects undertaken by resource projects are compensated for the damage. Such damages may include but not be limited to, contamination of water, depletion of water, damage to land, damage to business, and damage to health; and

- An Environment Protection and Rehabilitation Trust Fund

This Trust Fund would be established by the Commonwealth Government and would require, in collaboration with all States and Territories, for all resource companies operating in Australia to put monies into this trust fund up front to address and remedy where possible:

- any damage caused whether directly or indirectly to the environment by the resource project; and
- rehabilitation of resource project sites and associated areas should the company go broke, restructure, or encounter financial difficulty.

Recommendation 13 1.46 That the Commonwealth Government work with all states and territories to ban the process of hydraulic fracturing (fracking) across the country.

Recommendation 14 1.47 That the Commonwealth Government works with all states and territories to give all landholders the immediate right to refuse mining on their land.

Recommendation 15 1.48 That the Commonwealth Government introduce legislation to ban donations from resource companies to political parties.

Recommendation 16 1.49 That the Commonwealth Government establish a Royal Commission into the Human Impact of Unconventional Gas Mining.

Recommendation 17 1.50 That the Commonwealth Government work with the states and territories to urgently transition to green energy to ensure the country's power supply is ensured, jobs are ensured and new emerging export markets are opened and supported.

Recommendation 18 1.51 That the Commonwealth Government legislates to ensure national food security by developing a new law which implements the goals of the National Food Plan, provides statutory recognition of the Australian Council on Food and provides mandatory exclusion zones for resource development on important food-producing land.

Human Rights Impacts

The Permanent Peoples' Tribunal (PPT), as declared in its Statute, the Tribunal's competence extends to serious and systematic violations of the rights of peoples, whether committed by States, by authorities other than States, or by private groups or organizations. The Tribunal is competent to give judgements **on any international crime, specifically on crimes against peace and humanity, genocide, any infringement of the**

fundamental rights of peoples and minorities, grave and systematic violations of the rights and freedoms of individuals.

On [January 2018](#), the PPT has been requested to formulate an [Advisory Opinion](#) on the activities included under the label of fracking and other unconventional oil and gas extraction techniques, and on climate change, with respect to their impact on the fundamental rights of affected populations and on the rights of nature.

In its conclusion, the PPT:

1. Recognises the full responsibility of State and non-state actors for the commission of systematic violations of human, peoples, ecological, and nature rights as they are affirmed and sanctioned in the existing international law.
2. Underlines the failure of existing international juridical system and documents to fully address the responsibilities of the same actors with respect to the spectrum of clearly documented violations of peoples and nature rights.
3. Recognizes and congratulates those countries and sub-state jurisdictions that have banned fracking, and condemns those countries and sub-state jurisdictions that have revoked bans and moratoria on fracking.

The full advice can be read [here](#). The NSW Government must consider this advice.

Health

The Chief Scientist Recommendations did not adequately address health in the first instance.

In 2013 The Chief Scientist of NSW was charged with undertaking an independent review into CSG activities in NSW. The terms of reference for that review included specifically to:

“Identify and assess any gaps in the identification and management of risk arising from coal seam gas exploration, assessment and production, particularly as they relate to human health, the environment and water catchments;”

Health has been conspicuously missing from the assessment process in NSW.

NSW Health supplied a 2.5 page submission to Narrabri Gas EIS advising its course of action. NWPA would like to take this opportunity to point out that a “Watching Brief” is negligent and shows a complete lack of Duty of Care. The host community deserves to have a comprehensive, independent Health Impact Assessment completed before even the first well pad is cleared.

To date, this has not been done in Australia but what we can present to you is a document that has grown in length over the years:

[Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking \(Unconventional Gas and Oil Extraction\) Sixth Edition, June 19, 2019](#)

The Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (the Compendium) is a fully referenced compilation of evidence outlining the risks and harms of fracking.

The Compendium is organized to be accessible to public officials, researchers, journalists, and the public. In addition, the Compendium is complemented by a fully searchable, near-exhaustive citation database of peer-reviewed journal articles pertaining to shale gas and oil extraction, the Repository for Oil and Gas Energy Research, that was developed by PSE Healthy Energy and which is housed on its website (<https://www.psehealthyenergy.org/our-work/shale-gas-research-library/>).

Please, do not ignore this document.

There are already documented impacts in Australia. Many residents near gas fields in both NSW and Queensland have reported high levels of chronic and acute health issues.

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|---|--|
| <ul style="list-style-type: none"> + Nose bleeds + Headaches + Eye irritation + Skin irritations and rashes + Coughs, chest tightness + Muscle spasms + Pins and needles + Severe fatigue + Stress | <ul style="list-style-type: none"> Increased emergency visits and hospitalisation for + Asthma + Other respiratory problems + Cardiovascular illness + Circulatory problems + Adverse birth outcomes |
|---|--|

Despite 21,000 gas wells in Queensland and Santos' application for 850 wells at Narrabri NSW, no in-depth health impact study in an Australian gas field has never been completed.

Research conducted in the Darling Downs gas fields region using hospital admissions data from the Darling Downs Hospital and Health Services reveals that levels of the aforementioned conditions could be associated with living in or near the gasfields.¹

The NSW Department of Health refused to acknowledge this preliminary research, pointing to "confounding factors". Rather than account for confounding factors, like any other epidemiological study should do, NSW Health chose to discount this red flag. The Department declined to attend the Coal Seam Gas and Public Health Conference in Narrabri in August 2018 where experts gathered to discuss the latest Australian research on the impacts of the unconventional gas industry on public health.

The experience in Queensland should be thoroughly assessed and possible links between the CSG industry and observed health concerns examined as part of the NSW Gas Plan, the ensuing recommendations and the assessment process, NOT after.

NSW Health is under considerable pressure over its hands-off stance towards the public health implications of coal seam gas, it is understood that NSW Health is now planning to provide a submission to the Independent Planning Commission. An obstacle could be the fact that NSW Health is relying on the NSW Environment Protection Authority for guidance and Santos has declined to answer questions put to it by the EPA, such as the gas composition analysis of potential fugitive emissions.

GISERA

Gas Industry Social and Environmental Research Alliance (GISERA) is an alliance between the five biggest unconventional gas companies in Australia (Australia Pacific LNG, Origin Energy, QGC, AGL and **Santos**) and the Commonwealth Scientific and Industrial Research Organisation (CSIRO). The CSIRO logo is prominent on all GISERA reports.

GISERA released a scoping study in [January 2018 - Human Health Effects of Coal Seam Gas Activities – A Study Design Framework](https://gisera.csiro.au/wp-content/uploads/2018/03/Health-1-Final-Report.pdf) <https://gisera.csiro.au/wp-content/uploads/2018/03/Health-1-Final-Report.pdf>

"The study design project focuses on a review of the state of knowledge about health impacts of CSG activity, identification of gaps in the knowledge base, and development of a framework that can be used to design a study to address identified gaps."

KEY POINTS ABOUT THE GISERA FRAMEWORK FOR STUDYING CSG HUMAN HEALTH IMPACTS
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¹ Air Pollution and human health hazards: a compilation of air toxins acknowledged by the gas industry in Queensland's Darling Downs, GERALYN MCCARRON
<https://www.tandfonline.com/doi/full/10.1080/00207233.2017.1413221>

- ASSUMES that the impacts of coal seam gas industry can be adequately regulated and bases this view on the [Final Report of the Independent Review of Coal Seam Gas Activities in NSW](#)
- IGNORES the fact that Chief Scientist's recommendations have not all been satisfied
- RELIES on the fact that rural regions have pre-existing stressors and confounding factors as justification to avoid a Health Impact Assessment of CSG as part of the assessment of Narrabri Gas Project
- STATES THAT epidemiological studies of CSG public health impacts are not meaningful due to small population sample size of affected communities, but offers no solution for future research in similarly small populations
- ADMITS that "adaptive management*" has "not necessarily worked as a way to manage emergent issues in Queensland" but does not propose increased mandatory impact reporting by the CSG industry, nor tougher conditions be imposed in NSW.

*adaptive management describes a form of regulation where clear conditions are not established at the start of a Major Project, instead the proponent is allowed to change its obligations over time if problems are encountered.

A study commenced in May 2018 with a short title of 'Potential health impacts from CSG' and a long title of 'Identification and screening for potential human health effects of coal seam gas (CSG) activity in the southern Surat Basin, Queensland'. The proposed end date of June 2020 will be after the NSW government makes a decision on the Narrabri Gas Project. <https://gisera.csiro.au/project/potential-health-impacts-from-csg/>

[Dr Cameron Huddleston-Holmes](#), a geologist from CSIRO Energy, is the project leader of this health study. He works on environmental, geological and geotechnical problems in the earth resources industry, primarily in the unconventional gas and coal. His primary research interests were in structural geology. So why is he the leader of a health study, leapfrogging the nation's public health experts, epidemiologists and medical researchers?

Damian Barrett, the GISERA Director at the June meeting of GISERA NSW Regional Research Advisory Committee in Narrabri provided a summary of the Narrabri Gas Project proposal. Minutes record, 'Proposal may need recognition that we cannot take what is happening in Queensland as a guide here.'

Stephen O'Donoghue from NSW Planning told Sydney Knitting Nannas Against Gas in August 2019 that a health impact study is not a requirement of the assessment process in NSW. However, assessments of air, noise and social impacts will be posted on the project website prior to the IPC hearing. He said, NSW Health relies on the following for information

- NSW Environmental Protection Authority (EPA)
- Air Quality Impact Assessment – Narrabri Gas Project, Environmental Impact Statement, Appendix L – prepared by Air Environment Consulting for Santos <https://www.planningportal.nsw.gov.au/major-projects/project/10716>
- CSIRO data commissioned by EPA. <https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/csiro-methane-emissions-study>


Unfortunately, Santos has refused to provide gas emissions data as requested by the NSW EPA, and there is no resolve within the NSW Government to support the EPA's requests. Despite the Government's claims that the EPA is the "lead agency", the environmental regulator is being ignored.

Conclusion & Recommendations

Government documents supporting the NSW Gas Plan & Chief Scientist Recommendations:

https://www.resourcesandgeoscience.nsw.gov.au/data/assets/pdf_file/0007/534832/NSW-Gas-Plan-Government-Response-to-the-Chief-Scientist.pdf

http://www.resourcesandenergy.nsw.gov.au/_data/assets/pdf_file/0009/535059/NSW-Gas-Plan-Flier-FINAL.pdf

The people of NSW have repeatedly been told that the [NSW Gas Plan](#) “is about securing gas supplies for NSW households and businesses by establishing a **safe, sustainable industry**. In developing the NSW Gas Plan, the Government has acted upon the independent advice of the NSW Chief Scientist and Engineer, Professor Mary O’Kane, as set out in the [Final Report of the Independent Review of Coal Seam Gas Activities in NSW](#)  (243 KB PDF).”

Continues... **“The NSW Gas Plan accepted all Professor O’Kane’s recommendations and reset the approach to gas development in NSW.”**

The NSW Government has shown a tardy and negligent approach to implementing the recommendations. Gaping holes exist and there is a lack of implementation of the recommendations that reportedly underpin the NSW Gas Plan. Combined with the concerns around the failure to complete a comprehensive independent Health Impact Assessment NWPA ARE VERY CONCERNED about the culpability of the NSW Government in regards to the pursuit of a gas industry in NSW.

All assessment processes for current gas projects must now be paused until the Chief Scientists Recommendations have been implemented in full to the satisfaction of host communities.