

ENERGIA, AMBIENTE Y DERECHOS COLECTIVOS

*Yacimientos no convencionales
y las 'Zonas de Sacrificio'*

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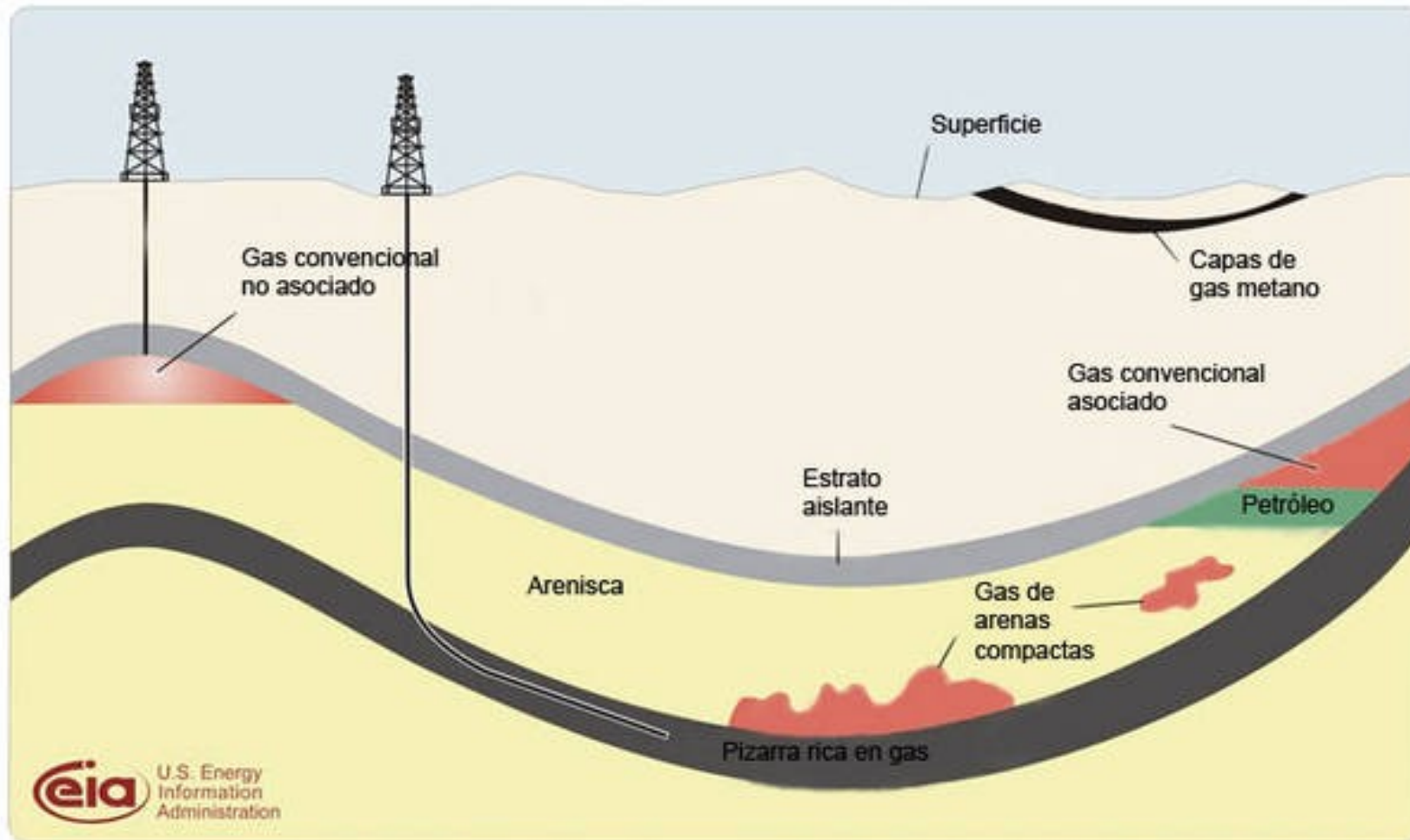
Energía, ambiente y derechos colectivos

Políticas públicas, actores y 'Zonas de Sacrificio'

1. Qué es el shale
2. Qué es el fracking y sus impactos
3. La situación en Neuquén y el caso YPF-Chevron

Explotaciones no convencionales

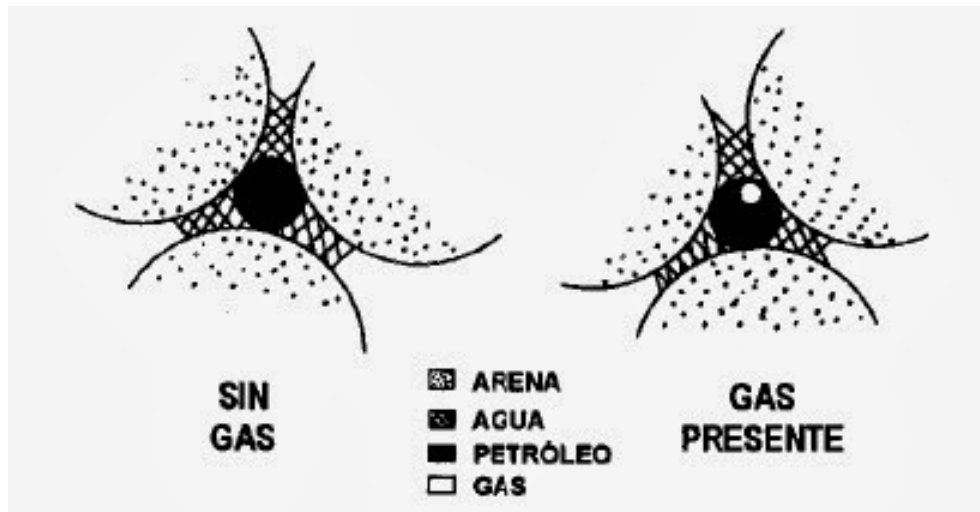
DIFERENCIAS CON EXPLOTACIONES CONVENCIONALES



IZQUIERDA: POZO DE GAS CONVENCIONAL. DERECHA: POZO DE GAS NO CONVENCIONAL PERFORADO HORIZONTALMENTE. FUENTE: U.S. ENERGY INFORMATION ADMINISTRATION

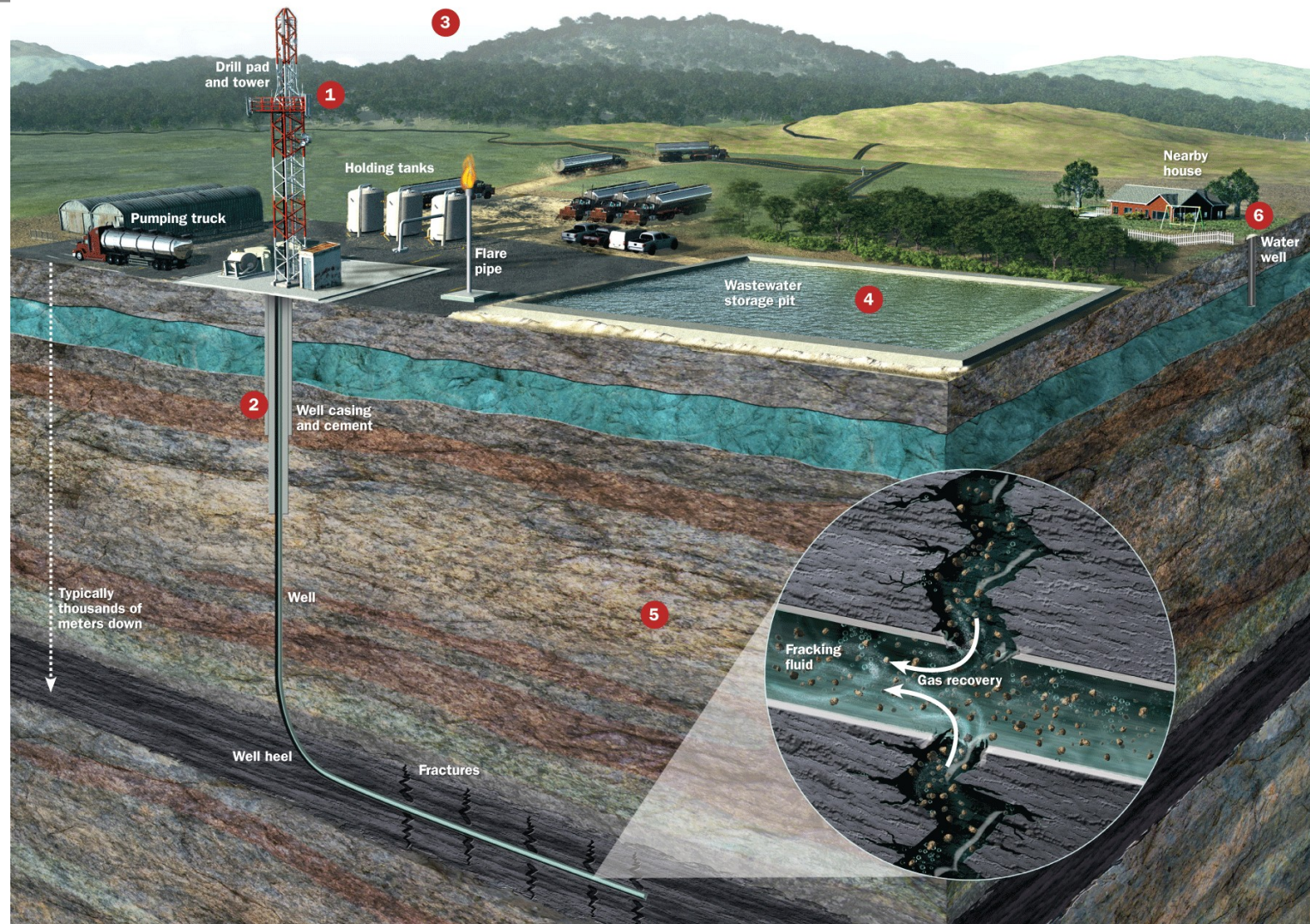
Explotaciones no convencionales

DIFERENCIAS CON EXPLOTACIONES CONVENCIONALES



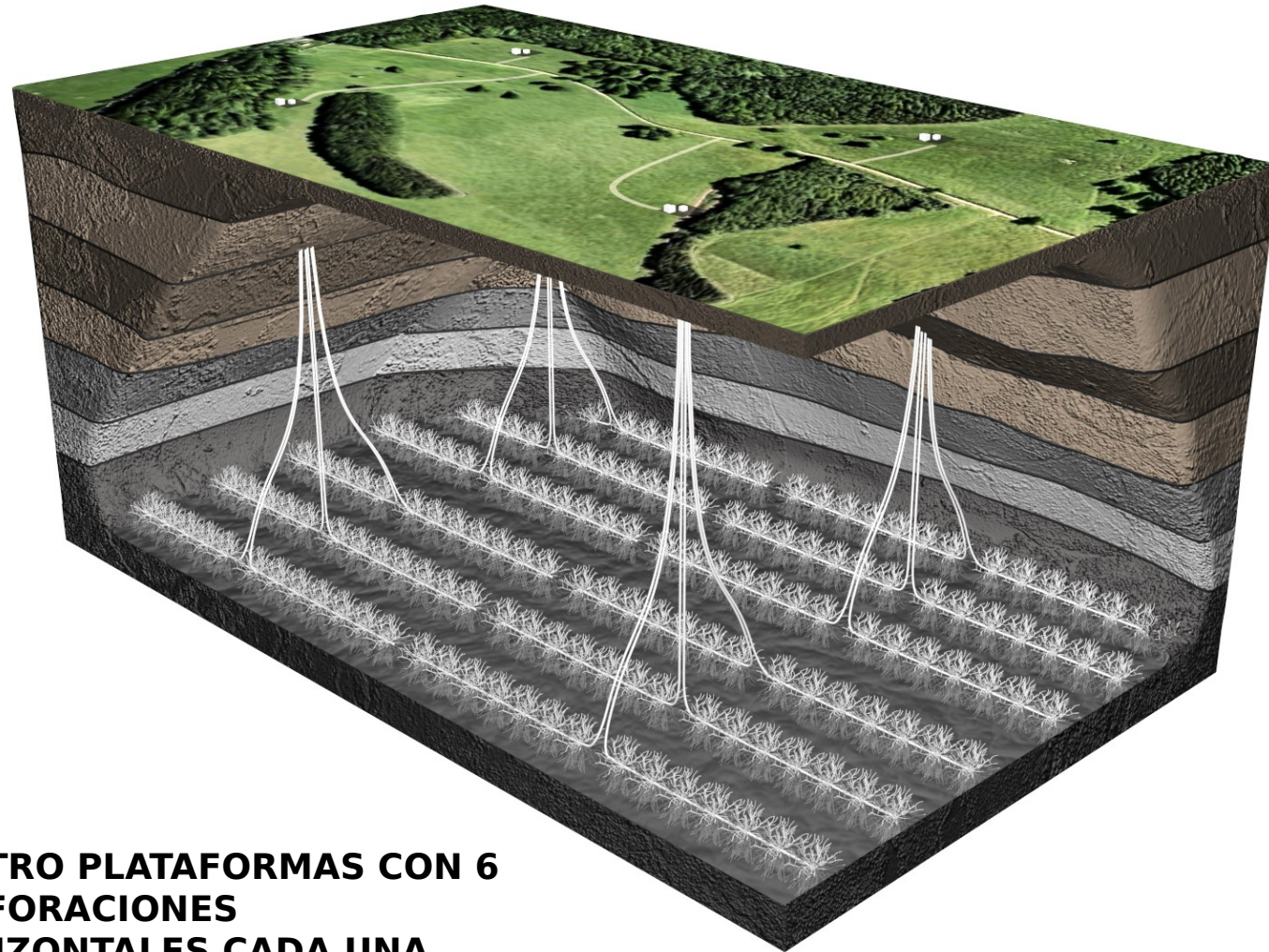
Explotaciones no convencionales

QUÉ ES EL FRACKING



Explotaciones no convencionales

DIFERENCIAS CON EXPLOTACIONES CONVENCIONALES



**CUATRO PLATAFORMAS CON 6
PERFORACIONES
HORIZONTALES CADA UNA**

Explotaciones no convencionales

DIFERENCIAS CON EXPLOTACIONES CONVENCIONALES

**POZOS EN
COLORADO,
ESTADOS
UNIDOS**



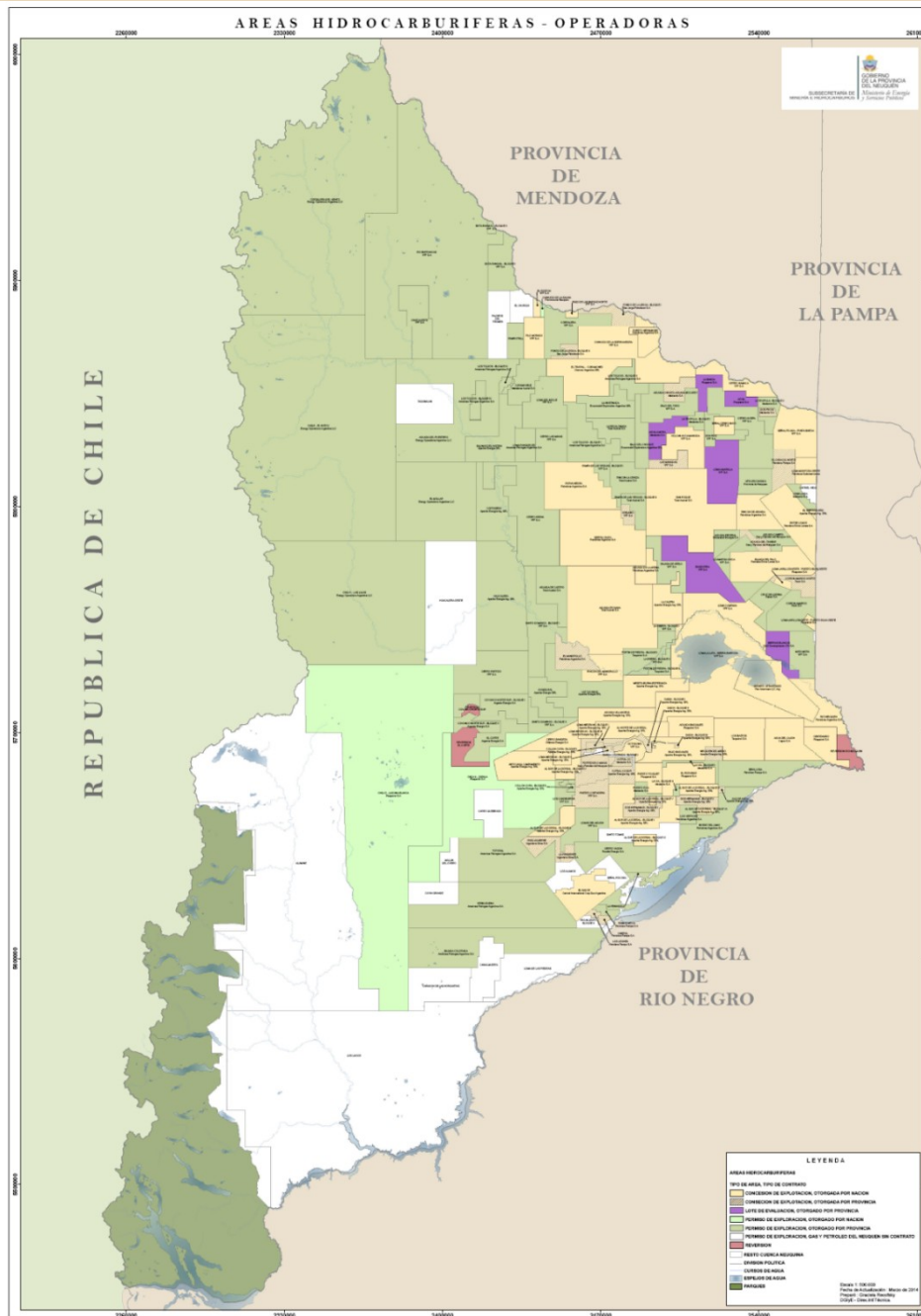
Explotaciones no convencionales

IMPACTOS ACUMULATIVOS



- **LOS IMPACTOS DEBEN CONSIDERARSE DE FORMA GLOBAL**
- **La contaminación de agua subterránea** por acción de los fluidos utilizados para las fracturas *-flowback-*, a raíz de roturas en los encamisados o filtraciones;
- **La contaminación de la tierra y agua superficial**
- **El sobreconsumo y agotamiento de fuentes de agua y otros recursos;**
- **Tratamiento inadecuado** de las aguas residuales;
- Los **impactos sobre la tierra y el paisaje;**
- Los **impactos derivados de la etapa de construcción de las locaciones.**
- Empleo de químicos en buena medida tóxicos.

Concesiones hidrocarburíferas en Neuquén



LEYENDA

AREAS HIDROCARBURIFERAS

TIPO DE AREA, TIPO DE CONTRATO

- CONCESION DE EXPLOTACION, OTORGADA POR NACION
 - CONCESION DE EXPLOTACION, OTORGADA POR PROVINCIA
 - LOTE DE EVALUACION, OTORGADO POR PROVINCIA
 - PERMISO DE EXPLORACION, OTORGADO POR NACION
 - PERMISO DE EXPLORACION, OTORGADO POR PROVINCIA
 - PERMISO DE EXPLORACION, GAS Y PETROLEO DEL NEUQUEN SIN CONTRATO
 - REVERSION
 - RESTO CUENCA NEUQUINA
- DIVISION POLITICA
- CURSOS DE AGUA
- ESPEJOS DE AGUA
- PARQUES

Escala 1: 500.000

Fecha de Actualización : Marzo de 2014

Preparó : Graciela Recofsky

DGlyE - Direc. Inf. Técnica.

Unconventional hydrocarbon boom in Neuquén province

In 2011, Argentina -90% energy matrix based on hydrocarbons-had an historic deficit in its energy trade balance. To solve it, the Government (that partially expropriated the mayor oil company in the country YPF) and the companies started a strong and quick movement to valorize the unconventional fields, where the extraction is made with new techniques: horizontal drilling and fracking (high pressure pumping of millions tons of water, sands and chemicals). This technology is globally denounced due to its great environmental, climate and social harm. According to the US government, Vaca Muerta and Los Molles formations are the ones of major potential outside North America. Until the moment, in Neuquén 400 wells were drilled.



Pillaging model

Since 2012 the Argentinean State, with YPF, negotiates with transnationals the Basin's exploitation along an exporter horizon. These companies (Chevron, Total and Shell, among others) seek to maximize profit without taking into account the environmental and social damage, as it happens for decades in the country. On the other hand, the provincial government -held since the '80s by the Sapag family through the Movimiento Popular Neuquino (MPN)- intensely strives to increase royalties while suppresses and judges the ones that protest. The provincial government, plus the powerful oil workers union, act in favor of the transnational companies, which concentrate and flight capital under an enclave economy.

The resistance

In the diversity, Indigenous mapuche communities, students, unions, teachers, workers, environmental collectives, social organizations and political parties organize mobilizations, festivals, well occupations, public talks, etc. to raise awareness over the impacts that fracking caused in other places and also remember that centenarian hydrocarbon history of the province did not bring "development" but pillage and contamination.

Social issues

Rupture of original cultures / Land occupation / Evictions / Social protest criminalization



Rio Negro's Upper Valley



Neuquén River, where an important part of the hydrocarbon production lies, joins Limay River and form the Negro River. It precisely in this confluence where one the most important fruit valleys of the country spreads. There Apache, bought by YPF, occupies land of a production in crisis to exploit unconventional hydrocarbons. Allen, a locality in the region, banned the activity but the provincial government turned to the Justice that deposed the measure, ignoring the mobilization of the people.

Auca Mahuida



The Natural Protected Area Auca Mahuida territory coincides with hydrocarbon areas. There, Total made fracking in 2012 in Pampa Las Yeguas. The French company operates, among others, in Rincón de la Ceriza and in San Roque areas. Shell's subsidiary, O&G Developments, operates in Aguila Mora. YPF and the provincial Gas y Petróleo also have areas over the territory that protects one of the places with largest biodiversity in the and Patagonia.

Environmental issues

Biodiversity loss / Greenhouse gases / Contamination risks



Suppression

While Neuquén's Parliament approved the first massive development shale project, between YPF and Chevron, five thousand people protested in the streets. The police repressed the mobilization with tear gas and rubber and lead bullets. The law passed either way. Two days after, the houses of Campo Maricó community, whose territory coincides with the approved exploitation, where burnt by anonymous hands.

Resistances

Cinco Saltos Municipality, in the bank of Neuquén River, was the first in the country that declared itself as fracking-free. The movement has obtained victories in over 30 local towns. Zapala is the only one in Neuquén. The union obtained in the diversity allowed to extend the level of awareness in a national scale.

References

Vaca Muerta and Los Molles shale formations
Natural Protected Areas
Well
Fracking well
Localities anti-fracking
Approved ban
Ban declared unconstitutional

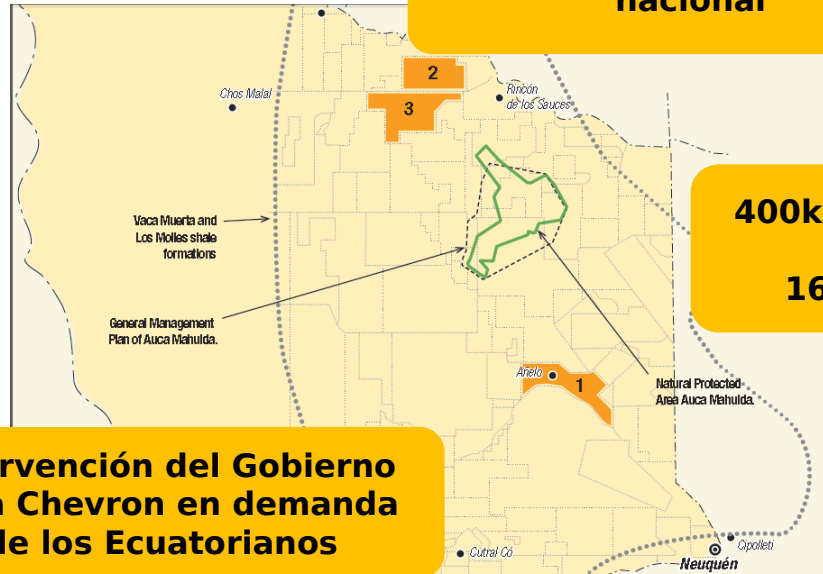
Selection of hydrocarbon areas and operators
1. Contadente: Pamparol, 2. Lindero Atravesado: Pamparol, 3. Loma La Lata: YPF, 4. Sierra Blanca: Shell, 5. Cerro de la Cruz: Shell, 6. Loma Campana: YPF, Chevron, 7. Aguada Pichana: Total, 8. Sierra Chica: Petróleos, 9. El Dorado: YPF, 10. Pampa de las Yeguas - Chique B: Total, 11. Rincón de la Ceriza: Total, 12. San Roque: Total, 13. Aguada Federico: Wintershall, 14. Vaca Escondida: Petróleos, 15. Bajo del Chique: Esso, 16. La Escondida: Total, 17. Aguila Mora: Shell, 18. Pampa Hernández: YPF, 19. El Trapal: Chevron, 20. Pampa Negra: Petróleos, 21. Cerro Partido: YPF, 22. Loma Negra: Apache, 23. Antofal: Compagnon: Apache.

Mapuche communities
1. Neneo Mapu, 2. Puel Puel, 3. No Keme, 4. Mapu Kio, 5. Kuyupilli, 6. Paynamí, 7. Campo Maricó, 8. Kikay, 9. Huayquilón, 10. Millan Cortés, 11. Chiquet, 12. Millan, 13. Millay Fall, 14. Tuván Kipatzen Mapuche, 15. Galesa, 16. Chichilco, 17. Logio Puel, 18. Antipán, 19. Kallakuri, 20. Zapala, 21. Granja, 22. Filón, 23. Cayupán, 24. Martín Limay, 25. Winesa Xaván, 26. Lucha, 27. Jams, 28. Zúñiga, 29. Zúñiga.

Shale en Argentina: Chevron

VACA MUERTA

Régimen promocional nacional



Intervención del Gobierno para Chevron en demanda de los Ecuatorianos

Contrato YPF - Neuquén

- Arbitraje extranjero
- Grandes facilidades en control ambiental
- Extensión de los plazos
- Beneficios fiscales

YPF - Chevron

- ?

AREA	ESTADO	TITULARES	PARTICIPACIÓN	OPERADOR
El Trapial	Explotación	Chevron (85%) - CFI (15%)		Chevron
Loma Campana	Explotación	YPF	YPF - Chevron	YPF
Chihuido de la Sierra Negra	Explotación	YPF	YPF - Chevron	YPF



Shale en Argentina

NO HAY CONSULTA Y ERRORES EN LOS INFORMES AMBIENTALES

Las compañías no tienen en cuenta

Dirección de
Áreas
Protegidas

Poblaciones
locales

- Crianceros y comunidades mapuche viviendo en las concesiones
- No hay consulta pública
- No hay compensación por daños ambientales
- Avances en tierras agrícolas



Hidrocarburos y modelo de acumulación

ARGENTINA COMO PUNTA DE LANZA Y RESISTENCIAS GLOBALES



- Más de **30 localidades** prohibieron el **fracking** en Argentina y se han presentado **proyectos de prohibición a nivel nacional** en el país y en Uruguay.

