

MINING OUT OF NATURAL PROTECTED AREAS

A proposal to shield our natural heritage
from extractive activities



Definition and purpose of NPA

Natural Protected Areas (NPA) have as their main purpose the protection and conservation of unique areas considered as such for their richness and diversity in natural resources, flora, fauna and representative ecosystems.¹ The General Law of Ecological Balance and Environmental Protection (LGEEPA by its acronym in Spanish) defines Natural Protected Areas as the “areas of the territory over which the nation exercises jurisdiction, in which the original environments have not been significantly altered by humans, or that its ecosystems and integral functions require to be preserved and restored.”²

In addition to being areas of nature protection, NPA have as objective to preserve natural environments representa-

tive of the different biogeographic and ecological regions, and also of the most fragile ecosystems;³ to safeguard the genetic diversity of wild species on which evolutionary continuity depends; in particular, to preserve species that are in danger of extinction, those threatened; among other objectives,⁴ to ensure the preservation and sustainable use of ecosystems, their elements and their functions;⁵ to provide a favorable ground for scientific research;⁶ to protect villages, communication channels, industrial facilities, agricultural uses and natural environments of areas, monuments and archaeological, historical and artistic vestiges, as well as tourist areas and other areas of importance for recreation, culture and national identity and indigenous peoples.⁷



Foto: Carlos Castillo. Wildlands Network

Natural Protected Area, Bavispe, Sonora

¹National System of Environmental Indicators, available at: https://apps1.semarnat.gob.mx:8443/dgeia/indicadores18/conjuntob/indicador/06_biodiversidad/01_terrestres/6_1_6.html

²LGEEPA, Article 44.

³LGEEPA, Article 45, fraction I reformed DOF 24-05-2013

⁴LGEEPA, Article 45, fraction II reformed DOF 13-12-1996

⁵LGEEPA, Article 45, fraction III reformed DOF 13-12-1996, 24-05-2013

⁶LGEEPA, Article 45, fraction IV reformed DOF 13-12-1996

⁷LGEEPA, Article 45, fraction VII reformed DOF 13-12-1996

Limitations on the LGEEPA and laxity in ‘Mining Law’:

The legal framework that regulates NPA is the LGEEPA, its by law on NPA, the RAMSAR Convention and the Convention on Biological Diversity. However, despite its objective and the fact that the existing legislation—in particular the LGEEPA—establishes important limitations to activities intended to be carried out within

the NPA, the truth is that they are under threat and even some of them are overrun by extractive activities such as mining, which clearly attacks the protection of these areas.

The following table describes the activities allowed in NPA based on Article 47 Bis of the LGEEPA.

NPA DIVISION BASED ON THE LGEEPA			
MAIN AREA	ALLOWED ACTIVITIES	SUBZONE	ALLOWED ACTIVITIES
CORE ZONE	Activities to preserve ecosystems and their elements, for scientific research and collection, and for environmental education are allowed. Uses that alter ecosystems are limited or prohibited.	Protection zone	Only environmental monitoring, non-invasive scientific research—in terms of the corresponding regulation—activities, which do not involve the extraction or transfer of specimens or habitat modification, will be allowed. ⁸
		Restricted use	Only non-invasive scientific research and environmental monitoring, environmental education and low environmental impact tourism activities (...), that do not imply modifications of the original natural characteristics or conditions (...), will be allowed. ⁹
BUFFER ZONES	Their basic function will be to guide the exploitation activities carried out in there, to conduct them towards sustainable development while creating the necessary conditions to achieve long-term conservation of their ecosystems.	a) Preservation	Only scientific research and environmental monitoring, environmental education activities and productive activities with low environmental impact that do not imply substantial modifications of the original natural characteristics or conditions, promoted by local communities or with their participation, and that are subject to constant monitoring of possible negative impacts that cause (...) will be allowed. ¹⁰
		b) Traditional use	Activities that threaten or disrupt the natural structure of populations and ecosystems, or the proper mechanisms for their recovery, will not be allowed. Only scientific research, environmental education and low environmental impact tourism activities will be allowed, as well as artisanal fishing with low environmental impact gear; also, the support infrastructure required, using traditional technologies and construction materials of the region, the use of natural resources to meet basic economic and self-consumption needs of the inhabitants, using traditional methods focused on sustainability (...) ¹¹

⁸LGEEPA, Article 47 Bis Section I, a) reformed DOF 24-05-2013

⁹LGEEPA, Article 47 Bis Section I, b) reformed DOF 24-05-2013

¹⁰LGEEPA, Article 47 Bis Section II, a) reformed DOF 24-05-2013

¹¹LGEEPA, Article 47 Bis Section II, b) reformed DOF 24-05-2013

	c) Sustainable use of natural resources:	Exclusively, the use and management of renewable natural resources will be allowed as far as these actions generate benefits for local residents, scientific research, environmental education and development of low environmental impact tourism activities.
	d) Sustainable use of ecosystems:	Low intensity agricultural, fishing and livestock activities are allowed in lands or areas suited for this purpose, also in those where such activities are carried out on a daily basis, and activities of artisanal fisheries, agroforestry and silvopastoral as long as they are compatible with the conservation actions of the area and contribute to erosion control and soil degradation prevention. ¹²
	e) Special use:	Public or private works may only be executed for the installation of infrastructure or exploitation of natural resources that generate public benefits and keep harmony with the landscape, that do not cause serious ecological imbalance and that are subject to strict sustainable use of natural resources regulations and strict adherence to management programs issued by the Secretariat. ¹³
	f) Public use:	Will be allowed, exclusively, the construction of facilities for the development of tourism support services, environmental research and monitoring, and environmental education consistent with the protection and management purposes of each protected area.
	g) Human settlements use:	In those areas where a substantial modification or disappearance of the original ecosystems has taken place due to the development of human settlements, prior to the declaration of the protected area.
	h) Recovery use:	Only native species of the region, or species compatible with the functioning and structure of the original ecosystems, may be used for rehabilitation when it is scientifically proven that the evolution and continuity of natural processes is not affected. ¹⁴

Source: Elaborated according on Article 47 Bis of the LGEEPA.

As can be seen in the table, the limitations to the mining activity indicated by the LGEEPA are important given that it is an extractive activity with strong environmental impact in the territories. In spite of this, the Mining Law (in its article 20) is very permissive regarding this, since it indicates the need to obtain authorization, permission or concession, depending on the case, from the authorities in charge of NPA when exploitation and exploration works being carried out. The LGEEPA

(in its article 88) reinforces the Mining Law by indicating that authorization by the Secretariat of Environment and Natural Resources will be required in order to perform mining exploration and exploitation works within the NPA.

Unlike the mining sector, the hydrocarbons sector did establish an explicit prohibition on activities within NPA; particularly, it states that exploration and extraction cannot be carried out within these areas.¹⁵

¹²LGEEPA, Article 47 Bis Section II, d) reformed DOF 24-05-2013

¹³LGEEPA, Article 47 Bis Section II, e) reformed DOF 24-05-2013

¹⁴LGEEPA, Article 47 Bis Section II, h) reformed DOF 21-05-2013

¹⁵Article 41 of the Hydrocarbons Law.

Mining projects and concessions within NPA

Given the laxity of the regulation, it is necessary to highlight that the threats and problems faced by NPA are extremely serious. Currently, there are 182 Federal Natural Protected Areas in the country, which cover an area

of 90.84 million hectares (224.37 million acres).¹⁶ By 2017, the Secretariat of Economy had granted almost 60 thousand hectares (148 thousand acres) of mining concessions within Federal NPA, as shown in the following table.

SURFACE OF THE CORE AREAS OF THE PNAs CONCESSIONED TO MINING

CORE ZONE NPA	STATE	TOTAL SURFACE OF THE CORE AREA	TOTAL SURFACE OF THE CORE AREA UNDER CONCESSION	PERCENTAJE CONCESSIONED
Alto Golfo de California y Delta del Río Colorado		164,676.55	248.52	0.2%
Chamela-Cuixmala		8,112.59	2,440.62	30.1%
El Pinacate y Gran Desierto de Alar		269,059.64	130.94	0.0%
El Triunfo	Chiapas	25,772.55	2,531.93	9.8%
El Vizcaino	Baja California	362,973.79	6,727.69	1.9%
La Encrucijada	Chiapas	37,010.27	50.71	0.1%
Los Tuxtlas	Veracruz	29,762.43	1,107.89	3.7%
Mariposa Monarca		13,559.03	804.46	5.9%
Río Lagartos		23,695.48	2,992.45	12.6%
Sierra de Manantlán		41,924.27	22,758.40	54.3%
Sierra del Abra Tanchipa		16,772.36	19.99	0.1%
Sierra Gorda		24,942.02	65.87	0.3%
Sierra Gorda de Guanajuato		77,645.49	7,668.73	9.9%
Zicuirán - Infiernillo		22,662.01	12,032.97	53.1%
TOTAL			59,581.18	

SOURCE: Llano, M. "Mining activity in Natural Protected Areas" (2017), In the extractive activities in Mexico: mining and hydrocarbons towards the end of the six-year term. Yearbook 2017. Fundar, Center for Analysis and Research. Mexico. Available at: <http://fundar.org.mx/mexico/pdf/AnuarioExtractivas2017.pdf>

¹⁶Natural Protected Areas Decreed, website available at: http://sig.conanp.gob.mx/website/pagsig/datos_anp.htm

The scene for the rest of the country's NPA, as well as for Ramsar sites, is no more encouraging: 74 of the main mining projects, according to the Mexican Geologic Service, are located precisely wi-

thin NPA and Ramsar sites and, counting both of them, it has been granted to mining a total of 2.22 million hectares, equivalent to 7.2% of its land area nationwide.

SURFACE OF NPA CONCESSIONED TO MINING

ANP SPHERE	TOTAL LAND AREA	CONCESSIONED LAND	PERCENTAJE CONCESSIONED	MINING PROJECTS
Federal	21,383,333.81	1,533,577.98	7.2%	48
State	5,364,241.33	349,251.18	6.5%	15
Local	184,351.23	37,501.64	20.3%	2
Voluntary conservation areas	412,502.04	38,728.99	9.4%	3
Ramsar⁷	3,547,119.33	266,395.50	7.5%	6
TOTAL	30,891,547.75	2,225,455.29	7.2%	74

Source: Llano, M. "Mining activity in Natural Protected Areas" (2018). In the extractive activities in Mexico: mining and hydrocarbons towards the end of the six-year term. Yearbook 2017. Fundar, Center for Analysis and Research. Mexico. Available at: <http://fundar.org.mx/mexico/pdf/AnuarioExtractivas2017.pdf>

To exemplify the impact generated by mining within NPA, it is of interest to mention that the Secretariat of Environment and Natural Resources has a record of "contaminated sites that are considered as environmental passives (Semarnat 2012), due to the release of materials or hazardous waste that was not appropriately mend to prevent the dis-

persion of contaminants." In this registry there are a total of 84 contaminated sites that correspond to mining activities, of which 11 are in sites located within NPA: El Vizcaino, Baja California Sur; Sierra Gorda, Guanajuato; Mariposa Monarca, Michoacan; Sierra de Huautla, Morelos and, El Pinacate and the Great Altar Desert, Sonora.¹⁷

Prohibition initiatives in the current legislature

In the Senate of the Republic, two law initiatives have been presented with the purpose to limit the mining activity within NPAs. In the first instance, Senator Guadalupe Saldaña of the National Action Party (PAN) presented a proposal that seeks to prohibit the exploration, exploitation and profit of metallic minerals reserved for the federation in NPA, and also areas in which any compound including cyanide or mercury is used.

The initiative aims to stipulate that mining exploration and exploitation activities that are intended to carry out in federal NPA must conduct an environmental impact assessment. It also proposes to prohibit land-use change in forest lands located within these NPA to employ them in the attainment of metallic minerals exploration, exploitation and profit activities. It establishes that National Commission of

Water (CONAGUA, by its acronym in Spanish) may not grant concessions for the exploitation and use of surface or underground national waters in the case of activities concerning metallic minerals located within NPA and, at the same time, prohibits to carry out works and activities of exploration, exploitation and profit of underwater minerals located in Mexican marine areas.

Secondly, the initiative presented by Senator Lucia Traviña, of MORENA Party, aims to preserve and, protect the NPA against the attacks of the mining industry. This initiative prohibits, both in the LGEEPA and the Mining Law, the accomplishment of extractive industry activities in NPA, as well as those that jeopardize the preservation of these areas. The initiative contemplates the prohibition of exploration, exploitation or extraction of underwater minerals in marine

¹⁷Llano, Manuel (2018) in In the extractive activities in Mexico: mining and hydrocarbons towards the end of the six-year term. Yearbook 2017, available at: <http://fundar.org.mx/mexico/pdf/AnuarioExtractivas2017.pdf>

areas of works.

Both initiative proposals were filed in September 2018 and to date, the corresponding opinion has not been published.

Finally, in November 2019, a third initiative was presented. Its purpose is to prohibit any type of mining exploration and exploitation activities within the Natural Protected Area (ANP). It also seeks to impose a penalty of one to thirteen years in prison to anyone who performs or consents, authorizes or orders the realization of mining activities within ANP

or areas bordering them. Like the other initiatives, it has not been discussed yet, therefore, from the civil society, we urge the opening of a space for discussion and analysis of these initiatives in an 'open parliament' in order to contribute to the process of ruling that, under a plural and diverse approach, allows the construction of a legislative instrument for the benefit of society and the environment. In summary, to guarantee the right to a healthy environment which is established in the Political Constitution of the United States of Mexico.

References:

- ▶ General Law of Ecological Balance and Environmental Protection (GLEBEP), published in the Official Gazette of the Federation on January 28, 1988. Last reform published DOF 05-06-2018, **available at: http://www.diputados.gob.mx/LeyesBiblio/pdf/148_050618.pdf**
- ▶ Hydrocarbons Law, last reform published DOF 11-15-2016, **available at: http://www.diputados.gob.mx/LeyesBiblio/pdf/LHidro_151116.pdf**
- ▶ Llano, Manuel (2018) in In the extractive activities in Mexico: mining and hydrocarbons towards the end of the six-year term. Yearbook 2017, **available at: <http://fundar.org.mx/mexico/pdf/AnuarioExtractivas2017.pdf>**
- ▶ Mining Law, published in the Official Gazette of the Federation on June 26, 1992 **available at: http://www.diputados.gob.mx/LeyesBiblio/pdf/151_110814.pdf**
- ▶ Regulation of the General Law of Ecological Balance and Environmental Protection (GLEBEP) **available at: http://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LCEEPA_ANP.pdf**



Foto: James Liu

Monte Mojino Reserve, located in the Sierra Madre Occidental, in the municipality of Álamos, Sonora, inside the federal natural protected area Sierra de Álamos-Río Cuchujaqui.

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