SEMARNAT
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

CONANP
COMISIÓN NACIONAL DE ÁREAS NATURALES PROTEGIDAS

Mexico: Towards achievement of Aichi Target 11 in the context of the Convention on Biological Diversity

Proposal of environmental policy instruments for the calculation of conservation areas in Mexico

December 2016

Mexico



SEMARNAT

SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

CONANP

COMISIÓN NACIONAL DE ÁREAS NATURALES PROTEGIDAS



Mexico: Towards achievement of Aichi Target 11 in the context of the Convention on Biological Diversity

Proposal of environmental policy instruments for the calculation of conservation areas in Mexico

December 2016

M e x i c o

Contents

Página

IMPORTANT NOTE **3**

ACKNOWLEDGEMENTS **3**

BACKGROUND **4**

SELECTION CRITERIA OF PROPOSED CONSERVATION AREAS FOR ACHIEVEMENT OF AICHI TARGET 11 ..... **5**

PROPOSAL OF CALCULATION OF CONSERVATION SURFACE AREA FOR ACHIEVEMENT OF AICHI TARGET 11 ..... **5**

FOLLOWING STEPS **15**

REFERENCES **16**

National Commission of Natural Protected Areas, 2016. Mexico: Towards achievement of Aichi Target 11 in the context of the Convention on Biological Diversity. SEMARNAT. United Nations Development Programme (UNDP). Mexico.

Coordination: Direction of Monitoring and Evaluation. Ignacio J. March Mifsut, Elva Ivonne Bustamante Moreno, Ignacio Paniagua Ruiz, Leonel Ruiz Paniagua.

Al servicio
de las personas
y las naciones

This publication is a result of the Project PNUD-CONANP 00089948 "Enabling of Institutional Sinergy for consolidating the Management of Natural Protected Areas of Mexico".
Authorization is given for reproduction of the contents of this publication provided that the source is provided.

Important note

This publication contains a proposal of calculation of conservation areas that could contribute to the achievement of Aichi Target 11 in the context of the Convention on Biological Diversity of which Mexico is a party. The instruments considered and the surface area values included until now are in no way an official decision, but only a preliminary approximation allowing for reporting the advances made in Mexico towards achievement of the Target 11. Some of the areas could vary in cases of change in the proposed criteria or elimination of areas calculated by any depuration process. Likewise, it is expected that the figures herein presented will be modified as new conservation areas in different modalities are established until the year 2020, the date agreed by parties for achievement of the goal.

Acknowledgements

Acknowledgment is given for provision of spatial information about the different modalities of conservation areas by the following institutions: National Forestry Commission (CONAFOR), General Wildlife Office (DGVS), National Commission for Knowledge and Use of Biodiversity (CONABIO), and by the participating State and Municipal Governments.

Mexico

Background

Mexico is one of the megadiverse countries[1] with strongest leadership developed within the Convention on Biological Diversity (CBD), of which the country is a party since 1993, particularly in the topics of natural protected areas and on the use and knowledge on biodiversity. Mexico has made the commitment to the CBD of protecting 17% of its terrestrial territory and 10% of its marine area[2] by the year 2020 considering diverse modalities of conservation areas (Strategic Goal C, Aichi Target 11 Biodiversity Targets). In that context, the Environment and Natural Resources Sectorial Program 2013-2018 (PROMARNAT) published on December 12 of 2013 in the Federal Official Gazette incorporated the indicator "*Conserved surface by means of natural protected area systems and other conservation modalities*" aligned to the target "Recover the functionality of watersheds and landscapes through conservation, restoration, and sustainable use of natural resources" with the goal of achieving the protection of the above-mentioned national percentages of land and marine surface areas by November of 2018, which would represent reaching Aichi Target 11 two years earlier than expected.





Convention on Biological Diversity

Aichi Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

[1] Countries considered as megadiverse are: Brazil, China, Colombia, Costa Rica, Ecuador, India, Indonesia, Kenya, Mexico, Peru, Southafrica, and Venezuela.

[2] Total national continental and emergent insular land surface: **196,437,500** ha.
Total national territorial marine surface: **314,992,000** ha.
Complying with Aichi Target 11 in Mexico requires protecting **33,394,375** ha of its land surface and **31,499,200** ha of its marine surface.

Mexico

The achievement of Mexico's commitment to the CBD involves important joint efforts made by Federal Government institutions including the Ministry of Environment and Natural Resources (SEMARNAT), the National Forestry Commission (CONAFOR), the National Commission of Natural Protected Areas (CONANP), the National Commission for Knowledge and Use of Biodiversity (CONABIO), the General Wildlife Office (DGVS), and by State Governments, private land owners, ejidos, and local communities.

Selection criteria of proposed conservation areas for achievement of Aichi Target 11

1. All natural protected areas established by the federal, state or municipal governments by means of a decree legally and specifically establishing its polygon, the objectives of their establishment, and a normative regulation for its protection and management. Such areas are generally established by properly published governmental decrees granting their public legal status as conservation areas.
2. Privately or socially owned areas dedicated to conservation of biodiversity and ecosystems under several modalities including Areas Voluntarily Intended for Conservation (ADVC) and Management Units for the Conservation of Wildlife (UMA) that have been properly authorized and listed in their respective official registries.
3. Conservation areas in certified forests by the federal forestry authority. This includes forests certified by the Forest Stewardship Council (FSC).
4. No take zones or "refuges protected from fishing" authorized by federal authority that have been properly established in a publication of the Federal Official Gazette.
5. Other areas intended for conservation having a legal basis.

Proposal of calculation of conservation surface area for achievement of Aichi Target 11

Following are the results of the calculation by December of 2016 of the extension of conservation area from different environmental policy instruments proposed for achievement of the Aichi Target 11:

Avoiding any overestimation due to overlaps between conservation modalities, a total of **31,248,801.97 hectares (ha)** correspond to land surface legally established by several environmental policy instruments[3], equivalent to **15.91**% of the total national land and inland water

[3] Natural Protected Areas (Federal, State, and Municipal), Areas Voluntarily Intended for Conservation , Certified Forests, Management Units for the Conservation of Wildlife, and Fish Refuges.

areas, while the extension of the protected national marine area is of **70,212.742.03** equivalent to **22.29 %** of the total (Tables 1 and 2).

In order to avoid duplicate records of protected areas, a meticulous analysis was previously made for excluding from double counting all those protected areas that presented overlapping of conservation modalities. Internal overlaps were first determined between Federal Natural Protected Areas (PAs) and, afterwards, overlaps were found between protected areas in the following hierarchical order: PAs (Federal, Sate, and Municipal), ADVC, Certified Forests, UMA, and No Take Zones or "Fish Refuges".

Polygons of State and Municipal Protected Areas were obtained from the geographical database of Protected Areas that was compiled in 2009 by Bezaury-Creel and collaborators[4] based on delimiting surfaces according to the different environmental policies. The analysis of CONANP eventually found noticeable discrepancies between the area mentioned in decrees and that of the polygons, because of which surface calculations were made using the geographic information system tools of CONANP (CONANP-GIS), which resulted in a total of **4,911,267.35 ha** (Bezaury Creel and collaborators data: 5,519,452.70 ha). The surfaces of State and Municipal PAs was updated thanks to information provided by the State Governments of Tamaulipas, Yucatan, Coahuila, Hidalgo, Puebla, and Guanajuato.

[4] Bezaury-Creel J.E., J. Fco. Torres, L. M. Ochoa-Ochoa, Marco Castro-Campos, N. Moreno. (2009). Base de Datos Geográfica de Áreas Naturales Protegidas Estatales y del Distrito Federal de México, 2009. The Nature Conservancy. México.

Table 1. Protected land and inland water areas in continental and islands portions of Mexico's territory

Environmental Policy Instrument	December 2016	
	Protected land and inland water (ha) CURRENT	% of total continental and insular land (INEGI)
Federal Natural Protected Areas	20,983,229.96	10.68
State Natural Protected Areas	3,928,020.73	2.0
Municipal Natural Protected Areas	198,288.29	0.10
Voluntary Conservation Areas (ADVC)	325,583.91	0.17
Certified Forests CONAFOR[5]	2,041,895.91	1.04
UMA[6] (Preliminary)	3,769,620.40	1.92
CURRENT TOTAL	**31,248,801.97**	**15.91 %**

[5] An evaluation of the status of the vegetation in certified forests is currently underway in order to have knowledge that is more precise. Preliminarily, the total area reported by CONAFOR is used. Several spatial inconsistencies were found (of up to 500 m) after spatial analysis in the CONANP-GIS; for this reason, adjustment of certified polygons was required based on spatial data of the National Agrarian Registry (RAN), which was used by CONAFOR for identifying such certifications. Overlaps between Federal, State, and Municipal Protected Natural Areas, and Voluntary Conservation Areas (ADVC) were excluded from calculations.

[6] Management Units for Wildlife Conservation (extensive UMA). Initially there was a geographic database of 1,879 UMA with a registered area of 10,580,962.10 ha in total. On this database, CONABIO made a depuration of UMA considering the land-use and vegetation data for the year 2010, generated by the MAD-MEX project using LANDSAT land cover data (30 m of spatial resolution), obtaining 575 UMA with a total area of 4,994.804 ha. The SECG/DES made a spatial analysis selecting only the UMA with 90% or more of natural vegetation cover. The result was 389 UMA with a total area of 4,302,804.88 ha. Finally, the SECG/DES made a spatial analysis for identifying the UMA with or without overlap between the different environmental policy instruments proposed for achievement of Target 11 of Aichi (Federal, State, and Municipal PAs; ADVC; and Certified Forests). The result was that of the 389 UMA, a total area of 3,769,620.40 ha which do not have overlaps with other conservation areas.

Table 2. Protected marine areas

Environmental Policy Instrument	December 2016	
	Protected marine area (Ha) CURRENT	% of total marine area (INEGI)
Federal Natural Protected Areas	69,458,708.06	22.05
Fish Refuges	754,033.97	0.24
CURRENT TOTAL	**70,212,742.03**	**22.29 %**

Considering the progress obtained to date in the achievement of Aichi Target 11, the goal was reached in 22.29% in relation to the marine areas. On the other hand, assuming the adoption of the proposed environmental policy instruments for the calculation of protected areas of Aichi Target 11 in the CBD, the creation of all the new terrestrial protected areas that CONANP has programmed to be established in the next 2 years, and the maintaining of all existing ADVC, by 2018 the coverage of 18.16% of the total national land and inland water areas would be reached.

It is important to anticipate factors that could delay the establishment of the programmed new terrestrial protected areas, which justifies a required increase of additional efforts to ensure the achievement of the goal, since this achievement is essential to maintain the credibility and prestige of Mexico as one of the leading countries of the CBD.

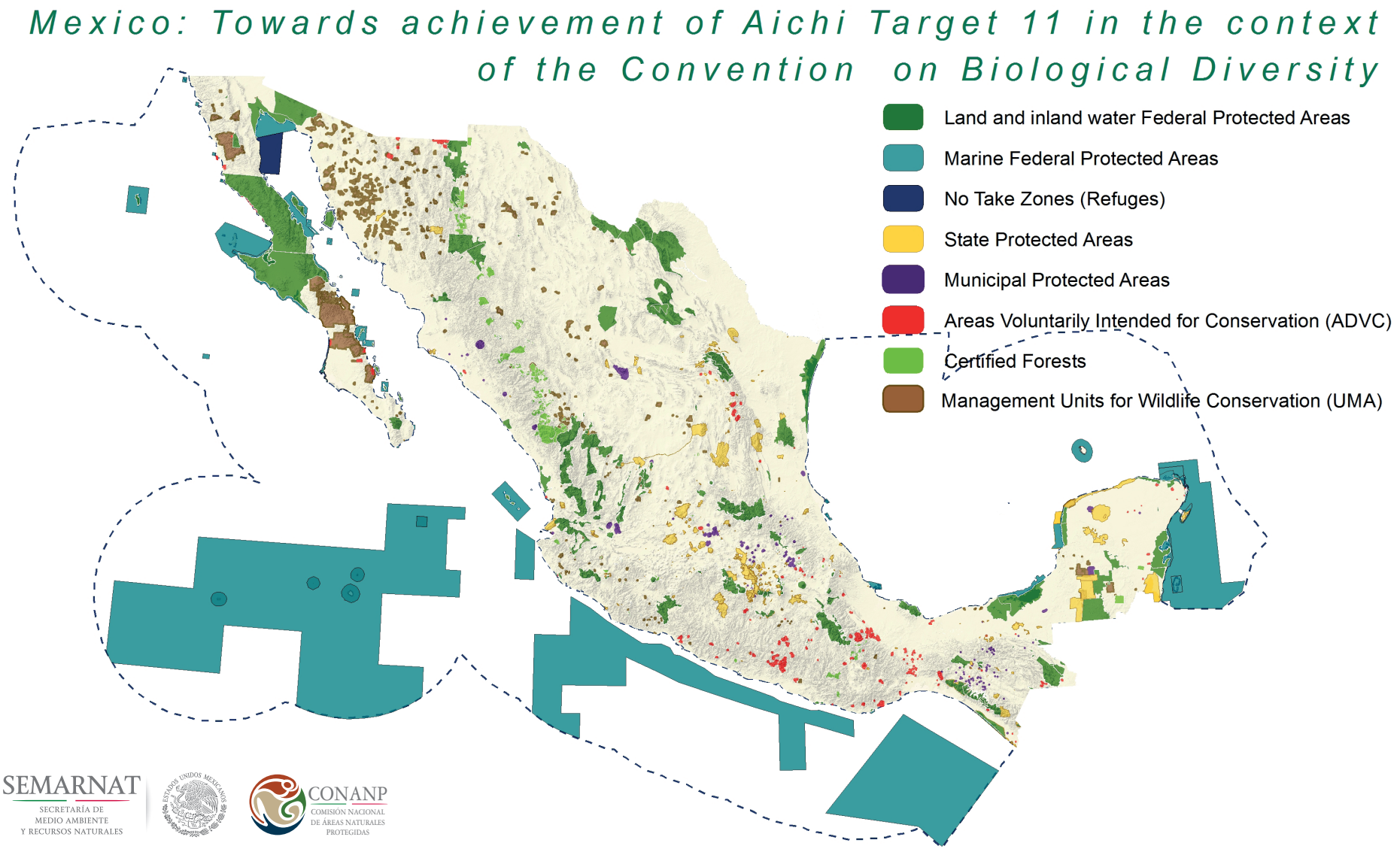


Figure 1. Distribution of conservation areas proposed for calculation of achievement of Aichi Target 11 within the Convention on Biological Diversity.

Another important aspect of systems of protected areas to be included for the achievement of Aichi Target 11 is that these systems must be ***effectively and equitably managed***. The National Commission for Natural Protected Areas of Mexico (CONANP) had developed a variety of management effectiveness assessment processes for different Federal Protected Areas, some of which had been supported by civil society organizations and international auditing institutions that together allow for making an important progress on this important aspect for meeting Aichi Target 11. Following are the methodologies of such processes.

- **Index of Implementation and Management for Protected Areas: INDIMAPA**

  Auditing of performance of management and implementation of protected areas was coordinated among the auditing institutions of 12 Latin American countries. This methodology has the goal of evaluating the existence of normative, institutional, and operational conditions required for Protected Areas for reaching the goals for which they were created, identifying weaknesses and opportunities for improvement, and adequate management practices in order to improve their management.

  INDIMAPA uses indicators and indexes to classify protected areas in three levels of management performance: low, medium, and high. It is assumed that when a protected area reaches a high level of implementation and management it is considered as having better conditions for reaching the goals established during its creation. In the year 2014, INDIMAPA was for the first time applied to 150 Federal PAs, and in 2015 it was extended to the 177 Federal Protected Areas in Mexico. CONANP has adopted INDIMAPA as tool for monitoring the performance of Federal Protected Areas.

Several methodologies with varied objectives are available for individual protected areas; the following had been applied in Mexico between 2005 and 2016:

- **Ecological Assessment Scorecards**

  The ecological assessment scorecards tool deserves consideration for evaluation of management effectiveness in Protected Areas, because it evaluates the status and trends of the protected areas based on expert opinions on 12 major questions.

The tool provides scorecards that serve as visual resources summarizing the conditions and tendencies of three fundamental elements of ecosystems: water, habitat, and biological resources. Between 2008 and 2015 scorecards and reports of conditions were obtained for 14 Protected Areas, some of these counting with at least two scorecards separated by a four year interval, therefore reflecting the trends in each of the three above-mentioned elements.

- **Rapid Assessment of Management Effectiveness in Mesoamerican Marine Protected Areas**

This tool has the objective of aiding managers of marine-coastal Protected Areas to assess the status of their administrative management by assessing results from aspects such as ecological integrity. The tool was applied in two Protected Areas between 2005 and 2013.

- **Management Effectiveness Tracking Tool (METT)**

The Management Effectiveness Tracking Tool (METT) is a rapid evaluation tool based on a questionnaire including the following management elements: context, planning, processes, and results. It provides monitoring mechanisms towards a more effective management.

- **Pomeroy and collaborators method for evaluating management effectiveness of marine protected areas**

The tool initially designed by Pomeroy and collaborators (2006) for marine protected areas incorporates three classes of indicators (biophysical, socioeconomic, and governance), is meticulous, and can be applied to different areas and environments for being adapted and applied according to the requirements of each Protected Area. Although designed for marine areas, in Mexico it has been adapted for use in terrestrial Protected Areas.

Figure 2 shows Protected Areas to which the above-mentioned management effectiveness assessment tools have been applied since 2005 and Protected Areas currently under processes of management effectiveness evaluation.

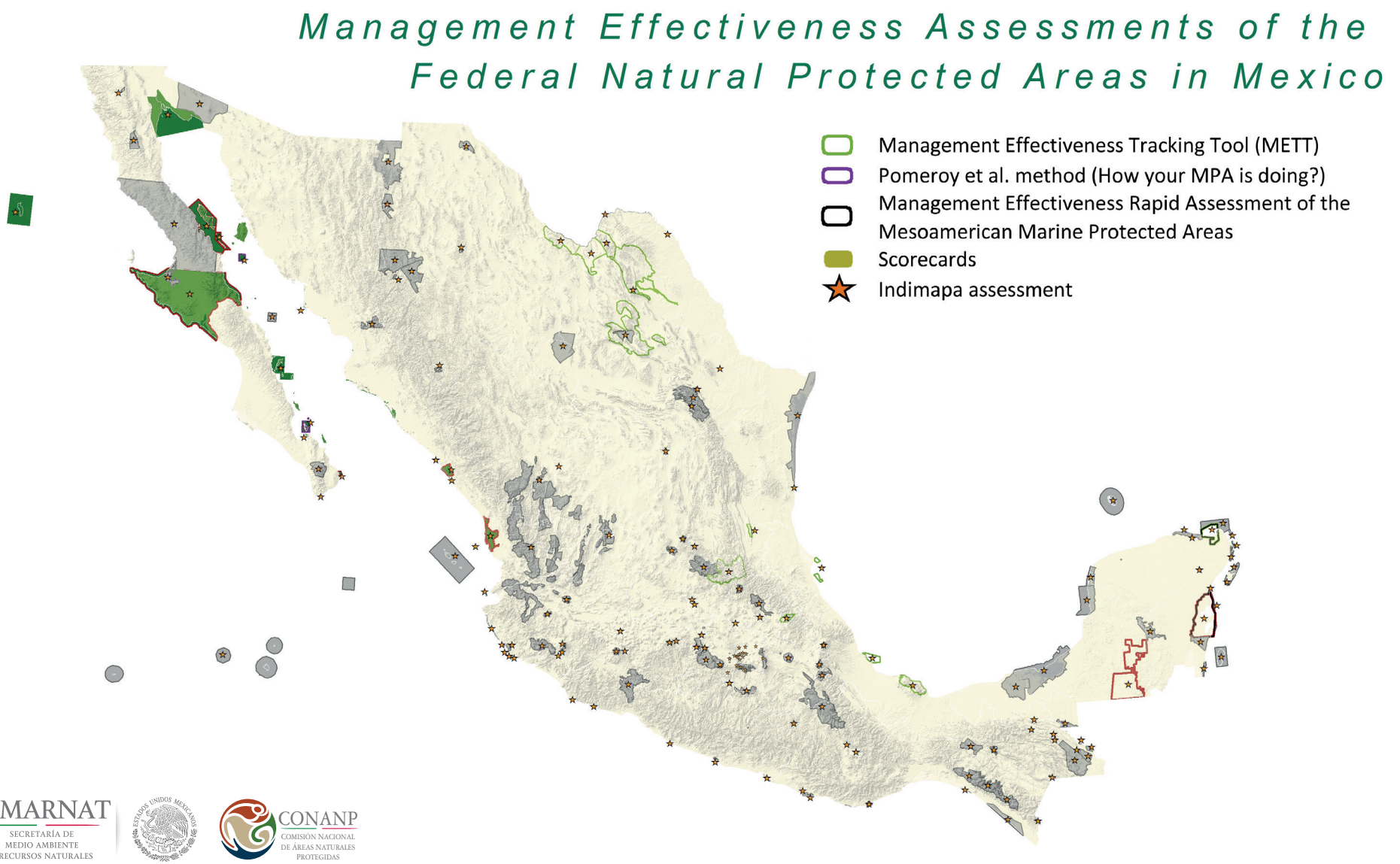


Figure 2. Distribution of Protected Areas with at least one Management Effectiveness Assessment by means of the methodologies described above.

Table 3. Methodologies of management effectiveness assessments applied in Mexico's PA between 2005 and 2016.

		Methods and year of assessment				PA currently under assessment
N	Protected Areas	*METT*	Pomeroy and collaborators method	Rapid Assessment	Ecological Assessment Scorecards	Pomeroy and collaborators method
1	Sian Ka´an Biosphere Reserve			2005		2016
2	Isla San Pedro Mártir Biosphere Reserve		2014		2007, 2010	
3	Archipiélago de Espíritu Santo National Park		2008		2010, 2014	
4	El Vizcaíno Biosphere Reserve				2008, 2012	2016
5	Isla Guadalupe Biosphere Reserve				2008, 2012	
6	Alto Golfo de California y Delta del Río Colorado Biosphere Reserve				2008, 2013	
7	Cabo Pulmo National Park				2008, 2014	2016
8	Archipiélago de San Lorenzo National Park				2012	2016
9	Bahía de Loreto National Park				2012	
10	Isla Isabel National Park				2012	
11	Islas Marietas National Park				2012	
12	Bahía de los Ángeles Biosphere Reserve				2012	2016
13	Marismas Nacionales Biosphere Reserve				2012	2016
14	Yum Balam Flora and Fauna Protection Area	2014		2013		
15	Balandra Flora and Fauna Protection Area				2014	
16	Cañón de Santa Elena Flora and Fauna Protection Area	2014				
17	Islas del Golfo de California Flora and Fauna Protection Area				2014	
18	Maderas del Carmen Flora and Fauna Protection Area	2014				
19	PN Sistema Arrecifal Veracruzano National Park	2014				
20	Ocampo Flora and Fauna Protection Area	2014				
21	Los Tuxtlas Biosphere Reserve	2014				
22	Sistema Arrecifal Lobos Tuxpan Flora and Fauna Protection Area	2014				
23	C.A.D.N.R. 004 Don Martin Flora and Fauna Protection Area	2014				
24	Cuenca Hidrografica del Río Necaxa Flora and Fauna Protection Area	2014				
25	Sierra del Abra Tanchipa Biosphere Reserve	2014				
26	Sierra Gorda Biosphere Reserve	2014				
27	Meseta de Cacaxtla Flora and Fauna Protection Area				2015	2016
28	Calakmul Biosphere Reserve					2016

Notes: Years of evaluation: 2005, 2007, 2008, 2010, 2012, 2013, 2014, 2015 y 2016; 170 Natural Protected Areas count with indicators of implementation and management (★ INDIMAPA, 2015).











Table 4 shows the number of PAs and the percentage of total protected area that already had been evaluated by different methods and PAs that currently are still being under evaluation.

Table 4. Percentage of conservation area in Federal Protected Areas evaluated by means of the methodologies described above and PA under evaluation processes

Methodologies for Management Effectiveness Assessment applied in Federal Protecte

Level of assessment	Methodology	Number of ANP by Method	Total protected area evaluated (ha)	% of total protected area	Date of assessment
Federal Protected Area	Rapid Assessment of Management Effectiveness in Mesoamerican Marine Protected Areas	2	628,199	2.40%	2005 and 2013
	Management Effectiveness Tracking Tool	11	3,047,582	2.50%	2014
	Pomeroy and collaborators method	9	5,138,923	20.20%	2014-2016
	Ecological Evaluation Scorecards	14	5,621,817	22.10%	2007-2015
	Total area of the 28 PA with completed assessments not considering Indimapa		13,808,322	56.90%	2005 to 2016
	INDIMAPA	170	25,621,863	99.97%	2015

Following steps

1) It is planned to implement communication efforts on the progress and accomplishments made towards the achievement of Aichi Target 11. Reference can even be made to the fact that two more years are available for achieving the international commitment and that the right direction is currently being followed.

2) Federal government could invite State Governments to establish new State protected areas, mostly for conservation of high ecological integrity[7] and for the protection of under-represented ecosystems (e.g., dry tropical forests and native grasslands).

3) To review areas in which Forest Reserves and other modalities were decreed in the past, that are currently in appropriate conservation status, and that have the possibility of becoming formal Federal, State, or Municipal Protected Areas.

4) Validate official information about UMA by identification of outstanding records.

5) Design and implementation of a permanent system of PA Management Effectiveness Assessment (EEM) to be applied to each of the Federal Protected Areas.

6) Integrate to PA mechanisms of management assessments, governance and connectivity attributes, in order include this factors in the calculation of level of achievement of Aichi Target 11 in Mexico PA.

[7] CONABIO has generated a spatially explicit model for estimating the current ecological integrity of terrestrial areas.

References

Corrales, L. 2004. Manual para la Evaluación Rápida de la Efectividad de Manejo en Áreas Protegidas Marinas de Mesoamérica. PROARCA/APM, USAID, TNC, Guatemala.

Hyde, D., Herrmann, H., Schmidt, K. and Richardson, K. 2011. Guía para la elaboración de Fichas de Evaluación Ecológicas en Áreas Marinas Protegidas para América del Norte. Comisión para la Cooperación Ambiental. Montreal, Canada.

Pomeroy, R.S., Parks, J.E. and Watson, L.M. 2006. Como Evaluar una AMP. Manual de Indicadores naturales y sociales para evaluar la efectividad de la gestión de Áreas Marinas Protegidas. UICN, Gland, Switzerland and Cambridge, United Kingdom.

Secretaría del Convenio sobre Diversidad Biológica. Plan Estratégico para la Diversidad Biológica 2011-2020 y las Metas de Aichi. Montreal, Quebec, Canada.

Secretaría de Medio Ambiente y Recursos Naturales. 2013. Programa Sectorial de Medio Ambiente y Recursos Naturales 2013-2018. Mexico.

Stolton, S., Hockings, M., Dudley, N., MacKinnon, K., Whitten, T. and Leverington, F. 2007. Reporting Progress at Protected Area Sites The Management Effectiveness Tracking Tool. Second edition. World Bank/WWF Forest Alliance published by WWF, Gland, Switzerland.

Tribunal de Contas Da União. 2015. *Relatório da auditoria coordenada nas áreas protegidas da América Latina* Brasilia, Brazil.

SEMARNAT
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

CONANP
COMISIÓN NACIONAL DE ÁREAS NATURALES PROTEGIDAS

PNUD
Al servicio de las personas y las naciones

SINERGIA
POR LA CONSERVACIÓN

Natural Protected Areas of Mexico

Towards achievement of Aichi Target 11 in the context of the Convention on Biological Diversity

Proposal for calculation of conservation areas of environmental policy instruments in Mexico

Strategic Plan for Biological Diversity 2011-2020
Aichi Target 11

Convention on Biological Diversity

By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape.

Legend

- Terrestrial Federal Protected Areas
- State Protected Areas
- Municipal Protected Areas
- Areas Voluntarily Intended for Conservation (ADVC, Private Reserves)
- Certified Forests
- Management Units for Wildlife Conservation (UMA)
- Marine Federal Protected Areas
- No Take Zones (Marine Refuges)

Evaluation and Monitoring Office
Department of Geomatics

Projection:North America Lambert Conformal Conic
Horizontal Datum: ITRF08
Ellipsoid: GRS80

Sources:
- National Commission for Natural Protected Areas.
- Federal Official Gazette. (DOF)
- National Institute of Statistics and Geography. (INEGI)
- National Forestry Commission (CONAFOR)

National Commissioner for Natural Protected Areas: Alejandro Del Mazo Maza

Cartographic design and spatial analysis:
Christian Lozano Esteban Correa
Jorge Ortiz Ignacio Quintero
Víctor Salazar Leonel Ruiz
Diana Leyja Ivonne Bustamante
Ignacio March

December 2016
México

100 50 0 100 200 300 400
Kilometers

Protected land surfaces in continental and emergent insular areas

Environmental Policy Instrument	December 2016	
	Protected land and inland water areas (ha) CURRENT	% of total continental and insular land (INEGI)
Decreed Federal Protected Areas	20,983,229.97	10.68
State Protected Areas	3,928,020.74	2.00
Municipal Protected Areas	198,288.29	0.10
Areas Voluntarily Intended for Conservation (ADVC, Private Reserves)	327,746.66	0.17
Certified Forests CONAFOR	2,041,895.92	1.04
Management Units for Wildlife Conservation (UMA)	3,769,620.40	1.92
TOTAL ACTUAL	31,248,801.98	15.91%

Protected marine surface

Environmental Policy Instrument	December 2016	
	Protected marine area (ha) CURRENT	% of total marine surface (INEGI)
Decreed Federal Protected Areas	69,458,748.07	22.05
No take zones (Marine Refuges)	754,033.97	0.24
TOTAL ACTUAL	70,212,782.04	22.29%

Spatial Analysis

In order to avoid double counting of protected hectares, a meticulous analysis was previously made in order to identify overlapping of areas in different modalities. Internal overlaps were first determined between Federal Natural Protected Areas (ANP) and, afterwards, overlaps were found between protected areas in the following hierarchical order: ANP (Federal, State, and Municipal), Areas Voluntarily Intended for Conservation (ADVC), Certified Forests, Management Units for the Conservation of Wildlife (UMA), and No Take Zones (Refuges).

Polygons of State and Municipal Protected Areas were obtained from the geographical database compiled in 2009 by Bezaury-Creel and collaborators based on delimiting surfaces according to the different instruments. The analysis performed found noticeable discrepancies between the surface area indicated in the decrees and that of the GIS polygons, because of which area calculations were made using the GIS tools of CONANP, which resulted in a total of 4,911,267.35 ha (official extension was of 5,519,452.70 ha).

The areas of State and Municipal PA was updated thanks to information provided by the State Governments of Tamaulipas, Yucatan, Coahuila, Hidalgo, Puebla, and Guanajuato.

An evaluation of the status of natural vegetation in certified forests is currently underway in order to have more precise knowledge. Temporarily, the total area reported by CONAFOR is used. Several spatial inconsistencies were found (of up to 500 m) after spatial analysis in the CONANP-GIS was performed; for this reason, adjustment of certified forests polygons was required based on spatial data from the National Agrarian Registry (Registro Agrario Nacional), which was used by CONAFOR for identifying such certifications.

Important note

This map contains a proposal of calculation of conservation areas that could contribute to the achievement of Aichi Target 11 in the context of the Convention on Biological Diversity (CBD) of which Mexico is a party. The instruments considered and the area values included until now are in no way an official decision, but only a preliminary approximation in order to allow the report of progress in Mexico towards achievement of the Aichi Target 11. Some of the areas could vary in cases of change in the proposed criteria, and other could be eliminated by future depuration processes. Likewise, it is expected that the figures herein presented will be modified as new conservation areas in different modalities are established until the year 2020, the date agreed by parties for achievement of the goal.

Acknowledgements

Acknowledgment is given for provision of spatial information about the different modalities of conservation areas by the following institutions: National Forestry Commission (Comisión Nacional Forestal, CONAFOR), General Wildlife Office (Dirección General de Vida Silvestre, DGVS), National Commission for the Knowledge and Use of Biodiversity (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, CONABIO), and by the participating State and Municipal Governments.

MÉXICO GOBIERNO DE LA REPÚBLICA

SEMARNAT SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

CONANP COMISIÓN NACIONAL DE ÁREAS NATURALES PROTEGIDAS