

**UNDER THE UNCITRAL ARBITRATION RULES AND
SECTION B OF CHAPTER 10 OF THE DOMINICAN REPUBLIC -
CENTRAL AMERICA - UNITED STATES FREE TRADE
AGREEMENT**

BETWEEN:

**SPENCE INTERNATIONAL INVESTMENTS, LLC, BOB F. SPENCE,
JOSEPH M. HOLSTEN, BRENDA K. COPHER, RONALD E. COPHER,
BRETT E. BERKOWITZ, TREVOR B. BERKOWITZ,
AARON C. BERKOWITZ AND GLEN GREMILLION**
INVESTORS / CLAIMANTS

AND

THE GOVERNMENT OF THE REPUBLIC OF COSTA RICA
PARTY / RESPONDENT

EXPERT REPORT-OF LIC. FEDERICO PERALTA BEDOYA

SEPTEMBER 29, 2014

LEGALCORP-ABOGADOS
PLAZA TEMPO, LOBBY B, 4 FLOOR
SAN RAFAEL DE ESCAZÚ
SAN JOSÉ, COSTA RICA
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I. INTRODUCTION & SUMMARY OF CONCLUSIONS

1. Counsel for Claimants have requested an expert analysis and a report in ICSID administered case number UNCT/13/2, concerning the possibility of building on the lots identified in the attached map¹ as SPG1, SPG2, SPG3, B1, B3, B5, B6, B7 and B8 in light of the level of intrinsic vulnerability of *Huacas-Tamarindo aquifer* in Playa Grande and the availability of water in that area. Claimants' lots located in Playa Ventanas are not subject to the same vulnerability map as the properties located in South Playa Grande.
2. In responding to these questions, I reviewed the relevant portions of the Respondent's Counter-Memorial on the Merits and related documents. As requested by counsel, I specifically considered the 2003 SENARA *Hydrological Study of the Huacas-Tamarindo Aquifer*, the 2005 SENARA *Technical Criteria for the Protection and Management of Coastal Aquifers of Santa Cruz*, the 2008 SENARA *Vulnerability Map of the Huacas-Tamarindo Aquifer* and the 2009 SENARA *Study of the Vulnerability Maps*, as well as other relevant studies or information.
3. As set forth in this report, the principle conclusions are as follows:
 - (i) There is sufficient water supply in Playa Grande to support the existing and future development for the next 20 years.
 - (ii) The use of the matrix in the manner described by Respondent in the Counter-Memorial is a current and controversial issue in Costa Rica with strong opposition from local and international experts.
 - (iii) Respondent is aware of the legal and technical inconsistencies of the matrix and in practice is not applying the matrix in the manner described in the Counter-Memorial.
 - (iv) For these specific lots, scientific evidence corroborates that there is no risk of bacteriological contamination to the nesting sites and that the zone is of high vulnerability, not extreme.
4. This Report is divided into **V Sections**. The first one is a brief introduction on the purpose and scope of this Report. The **Section II** sets forth my professional and academic credentials, **Section III** describes the legal framework related to the water availability and an aquifer vulnerability of Playa Grande, Santa Cruz, Guanacaste;

¹ Known as Exhibit C-2a in the arbitration.

Section IV discusses the specific results of the study of Claimants' lots and **Section V** contains the main conclusions from the Report.

II. PROFESSIONAL & ACADEMIC CREDENTIALS

5. I, Lic. Federico PERALTA BEDOYA, am the Attorney Associate in charge of the *Environmental Law and Sustainable Development Department* from *LegalCorp-Abogados* in San Jose (Costa Rica), a Costa Rica Law firm with more than 12 years of experience at different branches of the Law. *LegalCorp-Abogados* and its staff have worked for many of the leading companies and investors from United States of America, Canada, Europe and Latin America. Prior to joining *LegalCorp-Abogados*, I worked as paralegal and legal consultant for the Non-Governmental Organization known as the *Environmental Law and Natural Resources Center* (CEDARENA, acronym in Spanish) as well as with a very well-known and highly respected expert on Public Law: Dr. Manrique JIMENEZ MEZA.
6. I am an attorney with particular expertise in administrative, constitutional, environmental and urban law. I have more than fifteen years of experience advising companies, investors, public institutions and Local Governments, non-governmental organizations, and multilateral agencies. I have direct and extensive experience with environmental law, groundwater, land use policies and planning, drinkable water, environmental impact assessment, strategic environmental assessment, polluted sites and clean up processes; and have conducted a number of studies, administrative and judicial processes for clients of the private and public sector².
7. This report is based on information available as of the date of this report. This report is intended solely for use in the above referenced arbitration and is not to be used for any other purpose. Our fees are not contingent upon the opinions expressed herein, and neither I nor *LegalCorp-Abogados* or any of its Partners, Associates and/or employees has a financial interest in this arbitration.
8. The *curriculum vita* is enclosed to this report as Annex 1. The documents we relied upon for the purposes of this report are cited herein. Copies of those documents not already marked as exhibits in the arbitration are appended to this report.
9. To present my expert opinion herein, I had before me and reviewed the information outlined *ad infra*:

² See Annex 1.- Curriculum vita-Lic. Federico Peralta Bedoya.

- i. Morera, S. y Matamoros, G., 2003. Evaluación del potencial y demanda hídrica subterránea en el acuífero costero Huacas-Tamarindo, Santa Cruz, Guanacaste, SENARA. (R-046)
 - ii. DIGH-038-09-SENARA. (FPB-1)
 - iii. Agudelo, C. 2013. Evaluación hidrogeológica, hidrogeoquímica e isotópica del acuífero Huacas-Tamarindo, SENARA. (FPB-2)
 - iv. SUB-G-GSC-UEN-GA-2014-79 AYA (FPB-3)
 - v. Water Board Association, letter dated September 30, 2014 and official correspondence SGG-2014-1240. (FPB-4)
 - vi. Executive decree 32967-MINAE. (FPB-5)
 - vii. SENARA, MINAE, AYA. *Hydrogeology Methodologies to Analyze the Water Resource. Official Gazette n. 243*, December 15, 2010, reformed by the Article n. ° 2 of the Agreement n. 60 from the Ministry of Environment from June 12, 2012. (FPB-6)
 - viii. DIGH-655-10 SENARA, Hirata, Cesar Ricardo. End of Mission Report: *Supporting the Sustainable Management of the Tempisque Aquifer, Northern Region*. Department of Technical Cooperation. International Atomic Energy Agency, Foster & Hirata, et.al. The aquifer pollution vulnerability concept: aid or impediment in promoting groundwater protection? *Hydrogeology Journal (Revista de Hidrogeología)* (2013) 21: 1389–1392. (FPB-7)
 - ix. Official communication from the Costa Rican Professional Association of Geologists (FPB-8)
 - x. DIGH-143-14 SENARA (FPB-9)
 - xi. GG-1019-13, DIGH-OF-470-13 & DIGH-474-13 SENARA (FPB-10)
 - xii. Propuesta de modificación de la Matriz del 16 de Diciembre del 2013 (SENARA, AYA, MINSAL, Colegios Profesionales) (FPB 11)
 - xiii. HIDROTERRA CONSULTORES, 2012, *Estudio hidrogeológico para la determinación de la vulnerabilidad local del acuífero de un sector de Playa Grande*, Santa Cruz.
 - xiv. HIDROGEOLOGIA. *Estudio hidrogeológico y tránsito de contaminantes en Playa Grande, Cabo Velas, Santa Cruz, Guanacaste*. 2014. (FPB-12)
10. Also, by means of this Report I solemnly declare upon my honor and conscience that my statement will be in accordance of my sincere beliefs.

III. WATER AVAILABILITY & AQUIFER VULNERABILITY: THE CASE OF PLAYA GRANDE

11. As part of my practice as an environmental lawyer is not unusual to work with public agencies that confuse the issue of availability of water with vulnerability of an aquifer. However, it is extremely important to take into consideration that the availability is related to the quantity of water and vulnerability is an intrinsic characteristic of groundwater –e.g.: an aquifer-. In my experience, this is a very common mistake made by the public agencies in Costa Rica and this has led to the adoption of arbitrary positions without the pertinent legal and technical support. As a result, initial positions taken by public agencies are often reviewed and even overturned by courts.

A. Application of the matrix: A scientific controversy?

12. In reliance on the 2003 study, Respondent states that the aquifer does not provide sufficient water to allow development in Playa Grande. Contrary to what is suggested by Respondent, the 2003 study from SENARA (Morera, et. al. 2003)³ concludes that the demand is similar to the amount of water that infiltrates to the aquifer, not that such demand is higher. This position was reaffirmed by SENARA in a subsequent study conducted in 2009⁴. In a more recent study,⁵ Mrs. AGUDELO concludes that Playa Grande’s micro-basin is the only one within the *Huacas-Tamarindo* aquifer with an overexploitation of water; however the water supply of Playa Grande and Playa Ventanas is managed by a *Water Board Association* (known by the Spanish acronym “ASADA”) that is under strict control and supervision from the *Costa Rican Institute of Water Supply and Sewage System* (known by the Spanish acronym “AYA”) and according to official information there is enough water and hydraulic infrastructure to supply the demand for the next 20 years. This situation has been confirmed in the official correspondence from AYA⁶ and the *Water Board Association*⁷, as well as in a meeting with the Legal Department of AYA. Also, it is extremely important to take into consideration that according to **HIDROTERRA** report (VÁSQUEZ, et al. 2012) the water from the

³ Morera, S. y Matamoros, G., 2003. *Evaluación del potencial y demanda hídrica subterránea en el acuífero costero Huacas-Tamarindo, Santa Cruz, Guanacaste*, SENARA.

⁴ DIGH-038-09-SENARA.

⁵ Agudelo, C. 2013. *Evaluación hidrogeológica, hidrogeoquímica e isotópica del acuífero Huacas-Tamarindo*, SENARA.

⁶ SUB-G-GSC-UEN-GA-2014-79 AYA

⁷ Water Board Association, letter dated September 30, 2014 and official correspondence SGG-2014-1240.

wells of this local aqueduct comes from the *San Andres* aquifer, not *Playa Grande's* coastal aquifer.

13. On the other hand, vulnerability⁸ is an intrinsic characteristic of groundwater but the risk depends on the specific activity, construction and/or projects as well as the mitigation measures adopted to address the potential environmental impacts,⁹ *i.e.*: risks of the specific use. Groundwater vulnerability is a measure of how easy or difficult it is for contamination at the land surface to reach an aquifer. There are a number of methods used to determine the intrinsic vulnerability level of particular areas. In Costa Rica, the British G.O.D. method is used, which is an overlay method known to be useful for mapping large areas with high vulnerability contrasts. Three parameters are considered with this method: groundwater occurrence, the lithology of the layers overlying the aquifer, and the depth to groundwater. The results are mapped to create a vulnerability map that identifies certain areas as having particular vulnerabilities. The vulnerability maps are excellent tools for land use policies and regulations. In Costa Rica due to lack of precise information the G.O.D. method has been broadly promoted as the basis for determining vulnerability. In fact, it is established at the Annex 4 of the Executive Decree number 32967-MINAE and the *Hydrogeology Methodologies to Analyze the Water Resource*¹⁰ –*i.e.*: official guidelines from SENARA, MINAE and AYA- as one of the main methods to identify the vulnerability of an aquifer. The main issue is not the vulnerability maps produced through application of the G.O.D. method. This tool has been used successfully in several Latin-American countries, such as Argentina. Instead the main issue in Costa Rica has been a direct linking of the vulnerability maps with the land use restrictions and prohibitions contemplated in the matrix. This instrument –*i.e.*: matrix– has faced severe opposition from national and international experts¹¹ who consider that the way the matrix is being used within Costa Rica is not adjusted to science.
14. Since 2010, there have been several attempts to generate a new instrument¹² to serve as a guideline for determining whether development should be permitted in a

⁸ Aquifer vulnerability is defined as “an intrinsic property of a groundwater system that depends on the sensitivity of that system to human and/or natural impacts” (See Vrba and Zapotec, 1994).

⁹ Executive decrees 32967-MINAET.

¹⁰ SENARA, MINAE, AYA. *Hydrogeology Methodologies to Analyze the Water Resource*. Official Gazette n. 243, December 15, 2010, reformed by the Article n. ° 2 of the Agreement n. 60 from the Ministry of Environment from June 12, 2012.

¹¹ DIGH-655-10 SENARA, HIRATA, Cesar Ricardo. End of Mission Report: *Supporting the Sustainable Management of the Tempisque Aquifer, Northern Region*. Department of Technical Cooperation. International Atomic Energy Agency and FOSTER & HIRATA, *et.al*. *The aquifer pollution vulnerability concept: aid or impediment in promoting groundwater protection?* Hydrogeology Journal (*Revista de Hidrogeología*) (2013) 21: 1389–1392 & Official communication from the Costa Rican Professional Association of Geologists.

¹² Propuesta de modificación de la Matriz del 16 de Diciembre del 2013 (SENARA, AYA, MINSAL, Colegios Profesionales

particular area¹³. The application of the existing matrix implies severe restrictions to private property and sustainable development, which is unsupported by technical evidence.¹⁴ This situation has exposed **SENARA** to a series of legal actions. As a result of these legal actions and recognizing the weakness in a blanket application of these tools, **SENARA** has adopted a preventive and prophylactic approach, which considers each property on a case-by-case basis. It is possible to present specific technical studies with local data and with a more detailed scale that **SENARA** will consider to trump the general classification as set out in the vulnerability maps. Thus, despite the existence of the vulnerability maps and the matrix, which might on their face suggest that it is not possible to develop property located within an area of “extreme” vulnerability as shown on the map, there is no actual blanket prohibition on development in Playa Grande, and also it is important to take into consideration that Playa Ventanas is not included at this map because it is part of another micro basin which means that obviously in this case the Respondent’s argument evidently is not correct. If a specific hydrological study confirms that the aquifer at the site is not at “extreme” risk of contamination despite the fact that the site may appear in an area of “extreme” risk on a vulnerability map, a different (more appropriate) set of restrictions will apply to the site. According to the matrix, any site designated as “extreme” cannot be built upon. Any other designation (such as “high”) is associated with fewer restrictions - buildings are permitted as long as the potential risk to the aquifer is mitigated. **SENARA** has adopted this practical work-around to the situation, but this is not an efficient solution to the problem. What needs to be revised is the matrix itself, as it sets out land use restrictions and/or prohibitions that are unsupported by data.

15. Respondent is aware of the legal and technical inconsistencies of the matrix. In fact, **SENARA** accepts that coastal zones should be generally considered of high-vulnerability. Even though that these areas could easily be classified as extreme vulnerability zones, this is not consistent with the classification approach taken by other countries nor is it the approach advocated by the creators of the G.O.D. method of classification¹⁵.
16. According to **HIDROGEOTECNIA** (SUAREZ et al., 2014) and **HIDROTERRA** (VASQUEZ et al., 2012), the area classifies as a high-vulnerability zone, consequently according to the current matrix¹⁶, residential, commercial, tourism

¹³ DIGH-143-14 SENARA

¹⁴ DIGH-655-10 SENARA & HIRATA, Cesar Ricardo. End of Mission Report: *Supporting the Sustainable Management of the Tempisque Aquifer, Northern Region*. Department of Technical Cooperation. International Atomic Energy Agency.

¹⁵ GG-1019-13, DIGH-OF-470-13 & DIGH-OF-474-13 SENARA.

¹⁶ It is extremely important to keep in mind that the matrix is also contemplated by a regional study performed by a private company named GEOCAD and validated by the Costa Rican government through the administrative resolution 1410-2010SETENA and its amendments.

and/or agricultural activities are allowed. In general terms, according to the matrix the zoning requirements would be the following ones:

- Density: 20ha/Ha (20 residents per hectare)
 - Lot size: 1000 m²
 - Building footprint: 20%
17. These zoning requirements applied for single-family homes without sewage system, urbanizations and/or condominium projects without sewage systems and/or waste water systems are also allowed but a specific hydrogeology study must be done as part of the *Environmental Impact Assessment (EIA)*, which needs to be previously approved by **SENARA**. Additionally, hotels are also allowed with a room density of 50 persons per hectare and 20% of building footprint.
18. Agricultural activities such as farming –conventional and/or organic–, livestock and reforestation, as well as conservation activities, are also allowed but since the claimants have never shown any interest on this kind of activities the zoning requirements are not considered relevant for the purpose of this Expert Report.

IV. THE VULNERABILITY OF THE AQUIFER AT THE B LOTS AND SPG LOTS

19. In order to be able to respond to the specific question of whether Claimants would be permitted to build on the B lots and SPG lots, a specific hydrology study was commissioned of these lots. A hydrogeological study¹⁷ to determine the transit and residence time of contaminants –e.g.: septic tanks– were performed by **HYDROGEOTECNIA** in August and September 2014. Additionally an analysis of vulnerability was done primarily based on the piezometers study performed by **HIDROTERRA CONSULTORES** (VASQUEZ et al., 2012). I have reviewed the results of both of these private studies.
20. **HYDROGEOTECNIA** (SUAREZ et al., 2014) demonstrates with strong technical evidence that the vulnerability of the aquifer at the sites of the B lots and SPG lots is “high”, not extreme. The main concern with the development of residential projects in a location where there is a vulnerable aquifer is the possibility that black and/or grey waters from sewage will contaminate the groundwater. **HYDROGEOTECNIA** also concludes that it is physically impossible to contaminate groundwater or the beach (or affect the Leatherback turtle nesting sites) with bacterial, and/or organic compounds that might be introduced into the soil

¹⁷ The main goal of this study was to analyze the hydrogeological system to determine the intrinsic vulnerability and the risk of contamination of the costal aquifer(s) from lixivates derived from septic tanks and/or wastewater treatment systems.

from the septic tanks because the particles dissolve even before reaching the boundaries of the *Baulas National Marine Park*.¹⁸

V. CONCLUSIONS

21. Despite the fact that the B lots and SPG lots are in an area on the SENARA's regional vulnerability maps indicated to be of "*extreme*" vulnerability, an actual study performed in this specific area confirmed that the actual vulnerability classification is "*high*".
22. Once SENARA approves a hydrogeological study that confirms that the vulnerability of a particular lot is "high", the matrix is applied. Applying the matrix restrictions to an area of "high" vulnerability results in the ability to build residential homes, as long as proper mitigation techniques are used to minimize the potential of contamination of groundwater.
23. Further, the results of the study concluded that there was no risk that contamination from residential development would affect the beach at Playa Grande, as the transit rate for the bacteria and organic compounds through the soil is such that all contaminants would be dissolved before reaching the property line.

I submit this Expert Report to the best of my knowledge within the aforementioned Arbitral Proceedings. I solemnly declare upon my honor and conscience that what I have stated and will state during the proceedings is in accordance with my sincere belief and expert opinion.

(Signed)

Lic. Federico PERALTA BEDOYA

San José, Costa Rica.



¹⁸ HIDROGEOTECNIA. *Estudio hidrogeológico y tránsito de contaminantes en Playa Grande, Cabo Velas, Santa Cruz, Guanacaste. 2014.*

CURRICULUM VITAE



PERSONAL INFORMATION

Name: Federico Peralta Bedoya
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Address: Plaza Tempo, Lobby B, 4 Floor
Street/City/Country: San Rafael de Escazú, San José, Costa Rica
Date of birth: July 28, 1979
Email: fperalta@legalcorpcr.com
Profession: Attorney-Environmental Consultant

EXPERIENCE

February 2005 – 2014 *LegalCorp-Abogados (San José, Costa Rica)*

Position: Associate attorney, legal advisor and Environmental consultant

Legal and technical advice for clients of the private and public sector, as well as coordination, direction and analysis –ex ante and ex-post- of different projects, administrative procedures and judicial processes related to the following topics:

- Law (environmental, administrative, constitutional, municipal and urban)
- Integrated Water Resource Management (IWRM)
- Urban planning and land use regulations
- Remediation process (polluted sites)
- Mining and infrastructure
- Economic instruments for environmental management
- Environmental Impact Assessment (EIA)
- Strategic Environmental Assessment (EAE)
- Human right to water
- Sustainable development
- Urban ecology
- Water Board Associations (ASADAS)

January 2005 – December 2013 *Practical Solutions Institute PSI CR, S.A. (San José, Costa Rica)*

Position: Founding partner, Attorney, Legal Advisor and Environmental consultant

Legal and technical advice for clients of the private and public sector, as well as coordination, direction and analysis –ex ante and ex-post- of different projects related to the following topics:

- Law (environmental, administrative, constitutional, municipal and urban)
- Integrated Water Resource Management (IWRM)
- Urban planning and land use regulations
- Environmental Impact Assessment (EIA)
- Strategic Environmental Assessment (EAE)
- Sustainable development
- Urban ecology
- Water Board Associations (ASADAS)

November 2004 *Centro de Derecho Ambiental y Recursos Naturales (San José, Costa Rica).*

Position: Legal consultant

Comparative law analysis of the legal and institutional framework related to endangered species.

- Data search
- Analysis of sectoral and cross-sectoral policies
- Identify synergies, gaps and contradictions
- Define solutions to eliminate the gaps and maximize the synergies

July 2004 – January 2005 *BMP-Abogados (San José, Costa Rica)*

Cargo: Paralegal

Legal assistant on Administrative, Constitutional, Corporate and Municipal Law.

- Legal strategies
- Drafting of judicial documents and legal remedies –appeals, revision-
- Administrative procedures (permits, authorizations, licenses, concessions)

February 2003 – January 2004 *Centro de Derecho Ambiental y Recursos Naturales (San José, Costa Rica).*

Position: Paralegal and Legal consultant

Legal assistant on Administrative, Environmental and Constitutional Law for the Department of Water Resources and elaboration of the following studies:

- Comparative law analysis: Economic instruments for environmental management in Central America
- Urban Resources Management: The case of Alajuela

April 2002 – October 2003 *Dr. Manrique Jiménez Meza (Public Law Specialist)*

Position: Paralegal

Legal assistant on Administrative, Constitutional and Tax Law.

- Legal strategies (judicial procedures)
- Analysis of judicial and administrative files
- Drafting of judicial documents and legal remedies –appeals, revision-
- Administrative procedures (permits, authorizations, licenses, concessions)

January 2000 – December 2000 *Dr. Manrique Jiménez Meza (Public Law Specialist)*

Position: Academic assistant

Academic assistant for the courses of Theory of the State I y II

- Contribute with the definition scholar program and the bibliography
- Assistance on the evaluation of the results of the course

February 1999 – October 1999 *Amnistía Internacional (AI)*

Position: Volunteer

In charge of the Department of tortures and death penalty for Central America

- Data research.

- Drafting of amnesty requests and solicitudes.
- Examination and analysis of human rights violations.

EDUCATION

- 2013.- **Green and Sustainable Remediation.** *Interstate Technology and Regulatory Council (ITCR)*. On-line training course: 2 Hrs.
- 2013.- **Air and climate forecast (Recent developments in hydraulic fracturing litigation).** Latham & Watkins LLP, Webcast: 1 Hrs.
- 2013.- **Introduction to Microbiology, Biodegradation and Environmental Molecular Diagnostics (EMDs).** MicrobialInsights (Mi), On-line training course: 2.5 Hrs.
- 2012.- **An Improved understanding of LNAPL behavior in the Subsurface (State of science vs. State of practice) Part-I.** *Interstate Technology and Regulatory Council (ITCR)*, On-line training course: 2.5 Hrs.
- 2012.- **LNAPL characterization and recoverability (Improved analysis) Part-II.** *Interstate Technology and Regulatory Council (ITRC)*, On-line training course: 3.2 Hrs.
- 2012.- **Evaluating LNAPL remedial technologies for achieving project goals Part-III.** *Interstate Technology and Regulatory Council (ITRC)*, On-line training course: 2.5 Hrs.
- 2012.- **Climate change and land use policies.** *Lincoln Institute of Land Policy (LILP)*, On-line short course: 200 Hrs.
- 2009.- **Legal dimensions on land use policies and regulations.** *Lincoln Institute of Land Policy (LILP)*, On-line short course: 140 Hrs.
- 2009.- **Juris Doctor (Licenciatura en Derecho).** Universidad Escuela Libre de Derecho (*Summa cum laude probatus*) – San José, Costa Rica.
- 1997.- **Bachelor of Arts and Sciences.** *Lincoln International Academy* - Managua, Nicaragua.

CONFERENCES, CONGRESS, SEMINARS & WORKSHOPS

Attendance and participation on more the 15 workshops, seminars, courses and congresses related to different topics, such as Environmental, Administrative and Constitutional Law, Integrated Water Resource Management (IWRM), urban planning, bioclimatic architecture, urban ecology and Alternative Dispute Resolution for environmental conflicts; among others.

- 2012.- Preparation and presentation of the conference: *Legislación ambiental para estaciones de servicio*, III National Congress of the ACEC.
- 2011.- Participation on the *Taller Nacional para el Proceso Regional Preparatorio del Foro Mundial del Agua*, GWP-Costa Rica & DIGH-SENARA.
- 2005.- Preparation and presentation of the conference: *Ecología urbana, propiedad urbano-ambiental y uso del suelo*, FUNDES-Cartago Municipalities.
- 2005.- Preparation and presentation of the conference *Ecología Urbana y Derecho Ambiental. Escazú: El caso de los Sistemas de Soporte*, Escazú Municipality.
- 2004.- Preparation, participation and presentation of the *Primer taller sobre el Recurso Hídrico y Actividades Agrícolas para los habitantes de la Zona de Amortiguamiento Agrícola (ZAA)*. Escazú Municipality.
- 2001.- Preparation and coordination of the *Conferencia Inter-universitaria sobre Eutanasia*, Aula Magna de la Universidad Escuela Libre de Derecho.
- 2001.- Participation on the Academic Meeting for the XXXI Asamblea General de la OEA *Diálogo sobre la Carta Democrática Interamericana*.

PUBLICATIONS

- 2002-2003.- *Eterno Retorno de la Contaminación Urbana* (Construction Magazine from the C.C.C.), *Una Costa Rica Insostenible* (LA NACIÓN Daily newspaper) *La Última Frontera* (LA NACIÓN Daily newspaper), *Mes del Agua* (LA NACIÓN Daily newspaper) y *Paraíso: Una ventana hacia el mañana* (EL PARAISEÑO Monthly newspaper).
- 2004-2005.- *Eco-urbanismo* (LA NACIÓN Daily newspaper), *La Ciudad Difusa* (LA NACIÓN Daily newspaper), *Manejo de Desechos* (LA NACIÓN Daily newspaper) y *Ecología Urbana y Derecho Ambiental: En busca de la propiedad Urbano-Ambiental* (Construction Magazine from the C.C.C.).
- 2009-2010.- *Las baulas siguen en riesgo* (LA NACIÓN Daily newspaper).
- 2011-2012.- *Costa Rica vulnerable* (LA NACIÓN Daily newspaper), *Matriz genera incertidumbres para Estaciones de Servicio* (Gas Stations Magazine from the ACEC-Interview).

LANGUAGES

- Spanish (as native language).
- English (as second language).
- Italian (basic knowledge).

SKILLS, ASSOCIATIONS & OTHERS

- Experience on Microsoft Windows, Office (Word, Excell y Power Point), Outlook, Project Manager, Sharepoint e Internet.
- Capacity to direct interdisciplinary teams.
- Capacity to create, manage and examine projects.
- Incorporated to the Costa Rican Bar Association.
- Incorporated to *Secretaría Técnica Nacional Ambiental* (SETENA, CI-106-12)
- Incorporated to the research network of the IHDP-Spain (CCE-IHDP)
- International Environmental Law Research Centre (IELRC), Associate.
- International City Planners Network (ICPN), Associate.
- Smart Growth Network (SGN), Associate.