

Tanya M. Hayes
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EDUCATION

- 2007 **Ph.D. Public Policy, Indiana University, Bloomington,**
Dissertation: *Forest Governance in a Frontier: An Analysis of the Dynamic Interplay between Property Rights, Land-Use Norms and Agricultural Expansion in the Mosquitia Forest Corridor of Honduras and Nicaragua*
Chair: Elinor Ostrom
- 2002 **M.A. Urban and Regional Planning, University of California, Los Angeles**
Thesis: *Community Partners in Co-management: Creating Opportunities for Cooperation in the Río Plátano Biosphere Reserve*
Chairs: J.R DeShazo & Randall Crane
- 1995 **B.A. Politics, Whitman College, Walla Walla, Washington**
Honors Thesis: *The Cooperative as a Development Tool: Commercial Avenues towards Sustainable Development*
Chair: Eldon Kenworthy

PROFESSIONAL EXPERIENCE

Academic Appointments

- 2020-present **Professor**, Institute for Public Service and Environmental Studies program, Seattle University
- 2020-present **Director**, Institute of Public Service, Seattle University
- 2017-present **Director**, Environmental Studies program, Seattle University
- 2013-2017 **Director**, Public Affairs program, Institute of Public Service, Seattle University
- 2013-present **Associate Professor**, Institute for Public Service and Environmental Studies program, Seattle University
- 2007-2013 **Assistant Professor**, Institute of Public Service and Environmental Studies, Seattle University

2006-2007 **Visiting Professor**, Institute of Public Service and Environmental Studies, Seattle University

2006-present **Research Associate**, Center for the Study of Institutions, Population and Environmental Change (CIPEC), Indiana University

Additional Professional Experience

2014 **Consultant**, World Agro-forestry Centre, Institutional mapping of natural resource governance systems in Sentinel Landscape Project: Peru, Bolivia, Brazil.

2002-2006 **Research Assistant**, Center for the Study of Institutions, Population and Environmental Change (CIPEC), Indiana University

1998-1999 **Volunteer Coordinator**, Peace Corps, Panama

1996-1998 **Agro-Forestry Extension Agent**, Peace Corps, Panama

PUBLICATIONS

I. Peer-Reviewed Publications

2019 **Hayes, T.**, Grillos, T., Bremer, L. L., Murtinho, F., & Shapiro, E. (2019). Collective PES: More than the sum of individual incentives. *Environmental Science & Policy*, 102, 1-8.

2018 **Hayes, T.M** and Murtinho, F. Communal governance, equity and payment for ecosystem services. *Land Use Policy* 79:123-136.

2017 Murtinho, F., **Hayes, T.M.** Communal participating in payment for environmental services (PES): Unpacking the decision to enroll. *Environmental Management* 59(6) 939-955.

2017 **Hayes, T.M.**, Murtinho, F. and Wolff, H. The impact of payments for environmental services on communal lands: An analysis of the factors driving household land-use behavior in Ecuador. *World Development*. 93: 427-446. <http://dx.doi.org/10.1016/j.worlddev.2017.01.003>

2015 **Hayes, T.M.**, Murtinho, F. and Wolff, H. (2015) An institutional analysis of Payment for Environmental Services on collectively managed lands in Ecuador. *Ecological Economics* 118: 81-89.

2015 **Hayes, T.M.** Murtinho, F. Cardenas Camacho, L.M. Crespo, P, McHugh, S., Salmeron, D. Can conservation contracts co-exist with change? Payment for ecosystem services in the context of adaptive decision-making and sustainability. *Environmental Management*. Online Oct 2014. DOI: 10.1007/s00267-014-0380-1

2013 Murtinho, F., Eakin, H., Lopez-Carr, D. and **Hayes, T.M.** “Does External Funding Help Adaptation? Evidence from Community-Based Water Management in the Colombian Andes. *Environmental Management* 52(1103-1114).

- 2012 **Hayes, T.M.** Payment for Ecosystem Services, Sustained Behavioral Change, and Adaptive Management: Peasant Perspectives in the Colombian Andes. *Environmental Conservation* 39(2), 144-153.
- 2012 Murtinho, F, & **Hayes, T.M.** Adaptation in Resource-Dependent Communities: A Call for Greater Methodological Clarity in Adaptation Field Research. *Society & Natural Resources Journal* 25: 513-522.
- 2010 **Hayes, T.M.** and Persha, L. “Nesting Local Forestry Initiatives: Revisiting community forest management in a REDD+ world.” *Forest Policy and Economics* 12: 545-553.
- 2010 Dressler, W., Büscher, B., Schoon, M., Brockington, D. **Hayes, T.** Kull, C., McCarthy, J. and Streshta, K. From hope to crisis and back again? A critical history of the global CBNRM narrative. *Environmental Conservation*, 37(01), 5-15.
- 2009 **Hayes, T. M.** “A Challenge for Environmental Governance: Institutional Change in a Traditional Common-Property Forest System.” *Policy Sciences* 43(1) 27-48.
- 2008 **Hayes, T.M.**, and Murtinho, F. “Are Indigenous Forest Reserves Sustainable? An analysis of present and future land-use trends in Bosawas, Nicaragua” *Journal of Sustainable Development and World Ecology* 15(6): 497-511.
- 2008 **Hayes, T.M.** “The Robustness of Indigenous Common-Property Systems to Frontier Expansion: Institutional Interplay in the Mosquitia” *Conservation and Society* (6)2: 117-129.
- 2007 **Hayes, T. M.** “Controlling Agricultural Expansion in the Mosquitia: Does Tenure Matter?” *Human Ecology* (35)6.
- 2006 **Hayes, T.M.** “Parks, People, and Forest Protection: An Institutional Assessment of the Effectiveness of Protected Areas” *World Development* (34)12: 2064-2075.
- 2005 **Hayes, T.M.** and Ostrom, E. “Conserving the World’s Forests: Are Protected Areas The Only Way?” *Indiana Law Review* (38)3: 595-617.

II. Book Chapters

- 2011 **Hayes, T.M** “Direct Rent Capture in Context of Weak Institutions” In *Environment, Climate Change and Land Policies*. Lincoln Institute: Cambridge, MA.

III. Under Review

Hayes, T., Grillos, T., Bremer, L. Murtinho, F., Shapiro, E. “Collective PES: More than the sum of individual incentives” submitted April 2019 to *Conservation Letters*.

IV. Selected Consulting Reports & other Publications

- 2015 Freguine-Gresh, S. PM., Aubert, **T. Hayes**, Pesche, D. Lessons from institutional analysis conducted in three Sentinel Landscapes. Technical report prepared for CGIAR.
- 2015 **Hayes, T.** F. Murtinho and M. Bustamante. Participación comunitaria y conservación de páramo en la sierra ecuatoriana Technical Report prepared for Socio Bosque - Environmental Department of Ecuador. Quito, Ecuador
- 2014 **Hayes, T.** Institutional Mapping in the Western Amazon: Research framework and data gathering guide. Presented for CGIAR Sentinel Landscapes Peru, Bolivia, Brazil.
- 2010 **Hayes, T.** “Características Principales de los Participantes del Programa Silvopastoril FN-CIPAV” Technical report prepared for Fundación Natura, Bogotá, Colombia August 2010.

- 2006 **Hayes T.** “Análisis de la Expansión Agrícola en Miskitu Indian Tasbaika Kum, Bosawas, Nicaragua” Technical report prepared for Miskitu association ADEPCIMISUJIN and Centro Humboldt, Managua, Nicaragua, March 2006.
- 2006 **Hayes, T.** “Resumen Comunitario de Banaka: La Expansión Agrícola en el Río Plátano” Technical report prepared for community of Banaka and MOPAWI, Raista, Honduras, February 2006.
- 2005 **Hayes, T.** “Análisis de los Vínculos entre los Derechos de Propiedad y la Conservación: Lecciones de la Biosfera Río Plátano, Honduras y la Biosfera BOSAWAS, Nicaragua” Technical report prepared for The Nature Conservancy, Tegucigalpa, Honduras, November 2005.

PROFESSIONAL PRESENTATIONS

I. Invited Presentations & Workshops

- 2018 **Hayes, T.** Environmental Conservation in Latin America: Policies, program and their social justice implications. Key note speaker at Seattle Pacific University Colloquium on Environmental Justice, October, 5.
- 2017 **Hayes, T.** and F. Murtinho. Investigación siguiendo el marco teórico de análisis institucional de Ostrom (“Bloomington School”). Presented at Facultad Latinoamericana de Ciencias Sociales (FLACSO), Quito, Ecuador, July 13.
- 2017 **Hayes, T.** Política, comunidades y conservación. Workshop on research methods for examining governance of common-property resource arrangements presented for faculty of Bluefields Indian and Caribbean University (BICU), Puerto Cabezas, Nicaragua, August 2-3.
- 2016 **Hayes, T.** and F. Murtinho. La gobernanza de los sistemas socio-ecológicos en América Latina. Presented at Facultad Latinoamericana de Ciencias Sociales (FLACSO), Quito, Ecuador, July 14.
- 2016 **Hayes, T.** Políticas, comunidades y conservación. Análisis de sostenibilidad y gobernanza de recursos de uso común en América Latina. Presented at Universidad CentroAmericana (UCA), Managua, Nicaragua, April 26.
- 2016 **Hayes, T.** Análisis Institucional: Evaluación de las políticas de manejo de recursos naturales en comunidades rurales. Presented at Nitlapan, Universidad CentroAmericana (UCA), Managua, Nicaragua, April 25.
- 2015 **Hayes, T.** and F. Murtinho. Programa Socio Páramo en Territorios Colectivos. Impactos Institucionales y de Uso del Suelo. Presented at Facultad Latinoamericana de Ciencias Sociales (FLACSO), Quito, Ecuador, July 10.
- 2014 **Hayes, T.** Institutional Analysis of Western Amazon. Presented at CGIAR/CIRAD workshop on institutional mapping, CIRAD, Montpellier, France, December 2.
- 2014 **Hayes, T.** Mapeo Institucional para los Paisajes Centinelas. Methods workshop, Puerto Maldonado, Peru, August 4-9.
- 2014 **Hayes, T.** and F. Murtinho. Participación comunitaria y conservación de páramo en la Sierra Ecuatoriana. Invited by Ecuadorian Ministry of Environment. July 2014, Banos, Ecuador.

- 2013 **Hayes, T.** Mapeo Institucional para entender la gobernanza de bosques y paisajes. Presented at ICRAF, Lima, Peru, November 12.
- 2012 **Hayes, T.** “Local Forest Governance: Constructing Conservation Incentives that Fit the Context.” Paper presented to Gordon and Betty Moore Foundation collaborative workshop, Governance and conservation: Toward more robust indicators, Palo Alto, April 24-26.
- 2010 **Hayes, T. M.** “Manejo de Bosques en America Latina: Looking for Institutional Fit” Conference on the Commons. Universidad Javeriana, Facultad de Estudios Ambientales y Rurales. Bogotá, Colombia, July 28-29.
- 2010 **Hayes, T.M** “Direct Rent Capture in Context of Weak Institutions” Invited comments on John Dixon’s paper “Capturing Economic Rents to pay for Conservation of Sensitive Sites”. Comments presented at Lincoln Land Institute 5th Annual Land Policy Conference, The Environment, Climate Change and Land Policies. Cambridge, MA, May 23-25.
- 2008 **Hayes, T.M** “Lessons from the Field: Analyzing the Impact of Property Rights on Forest Management in Mosquitia Forest Corridor”. Paper presented at Seattle University Globalization and Justice: Interdisciplinary Dialogues, February 21-22, 2008.

II. Paper Presentations at Academic Conferences

- 2018 **Hayes, T.M.** and F. Murtinho. PES in the Commons: Assessing Behavioral and Social-Institutional Impacts. Presented at International Association for the Study of the Commons (IASC) Workshop: Working Together on the Commons, Tempe AZ, March 8-9.
- 2017 **Hayes T.M** and F. Murtinho. What is the role of communal governance in the implementation of PES? Presented at International Congress for Conservation Biology. Cartagena, Colombia, July, 2017.
- 2016 **Hayes, T.M.** “Do payments matter? The impact of Payment for Environmental Services on household behavior in the context of collective resource management in the Ecuadorian Andes.” Paper presented at Midwest Political Science Association, Chicago, April 2016.
- 2016 Benavides, JP., V. Robiglio, **T. Hayes.** “A Meta-analysis to identify patterns between livelihood outcomes and trees” Edenborough: Forests & Livelihoods (FLARE), December 2016
- 2015 **Hayes T.M.** and F. Murtinho “Do economic incentives drive collective behavior to govern the commons? An assessment of Ecuador’s Socio Bosque program” presented at Conference for the International Association for the Study of the Commons, 15th Biennial Global Conference, Edmonton, Alberta May, 2015
- 2014 **Hayes, T. M.** “The Challenge of Creating Process Oriented Indicators for Sustainability” Paper presented at Workshop on the Workshop in Political Theory and Policy Analysis, Bloomington, IN, June 12-15.
- 2013 **Hayes, T.M.** “Behavior beyond Economics: Payment for Ecosystem Services in the context of rural decision-making and sustainable forest management in South America.” Paper presented at the American Association for Geographers (AAG), Los Angeles, CA, April 9-13.
- 2010 **Hayes, T.M** “Are Contingent Contracts a Viable Policy Tool for Forest Management in Agro-ecological Landscapes? Lessons from the East Andes, Colombia.” Paper presented at International Association for the Study of the Commons (IASC) North American conference, Tempe, Arizona, September 30-October 3.
- 2009 **Hayes, T.M.** “Forest Management in Latin America: Looking for Institutional Fit.” Paper

- presented at the Conference on Human Dimensions of Global Environmental Change, Amsterdam, The Netherlands, December 2-4, 2009. Paper available at <http://www.earthssystemgovernance.org/ac2009/papers/AC2009-0387.pdf>
- 2009 **Hayes, T.M.** and Persha, L. “Policy Insights for Community Forestry: Lessons from a comparative analysis of forest management in Honduras, Nicaragua & Tanzania.” Paper presented at Workshop on the Workshop, Bloomington, Indiana June 4-10, 2009. Paper available at http://www.indiana.edu/~wow4/papers/hayes_persha_wow4.pdf
- 2008 **Hayes, T. M.** “Analyzing Institutional Change in Traditional Common Property Forest Governance Systems.” Paper presented at the biannual Conference of the International Association of the Commons, Cheltenham, England, July 14-19, 2008. Paper available at <http://dlc.dlib.indiana.edu/dlc/handle/10535/2924>
- 2008 Murtinho, F. and **Hayes, T.M.** “Insights from the Field for Measuring and Analyzing Adaptation Processes in Common-Pool Resource Management” 25 pages. London: Conference of the International Association of the Commons, July 14-19, 2008. Paper available at <http://dlc.dlib.indiana.edu/dlc/handle/10535/461>
- 2007 **Hayes, T. M.** “How can Environmental Policy Shape Indigenous Responses to Democratic and Market Change: An analysis of the ability to control agricultural expansion in the Mosquitia Forests of Honduras and Nicaragua”. Paper presented at the annual convention of the International Studies Association, Chicago, February 28-March 3, 2007.
- 2006 **Hayes, T. M.** “Controlling Agricultural Expansion in the Mosquitia: Does Tenure Matter?” Paper presented at the annual conference of the Latin American Studies Association, San Juan, Puerto Rico, March 15-18, 2006.
- 2005 **Hayes, T. M.** “Conserving the World’s Forests: Are Protected Areas the Only Way?” Paper presented at the annual conference of the American Anthropological Association, Washington, D.C., November 30-December 4, 2005.

RESEARCH GRANTS AND AWARDS

- 2017 **National Sciences Foundation (SES1734051)** “RUI: What happens when payments stop? Collective resource management under the rise and fall of payment for environmental services” (PI) \$496,164
- 2016 **Research Assistant Fellowship, College of Arts and Sciences, Seattle University.**
- 2012 **National Science Foundation (SES 1156271):** “RUI: Influence of Economic Incentives on Common-Property Forest Management: Rural Decision Making in the Context of REDD+” (PI) \$450,000
- 2011 **Summer Faculty Fellowship, College of Arts & Sciences, Seattle University:** “Assessment of the Social and Ecological Impacts of Payments for Forest Conservation in Peasant Communities, Ecuadorian Andes” (PI) \$7,000
- 2011 **Global Engagement Fellowship, Seattle University:** “Student Service-Learning Research Opportunity: Payments for Forest Conservation in Peasant Communities in the Ecuadorian Andes” (PI) \$9,500
- 2010 **Provost’s Summer Faculty Fellowship, Seattle University:** “Assessment of Incentives for Sustainable Farming in the Colombian Andes” (PI) \$5,000.
- 2009 **Endowed Mission Fund Fellowship, Seattle University:** \$3,000

- 2005 **National Science Foundation (DMRS)**, Doctoral Dissertation Research Improvement Grant. \$11,000.
- 2005 **IIE Fulbright Fellowship**. Award for research and study in Honduras.

COURSES TAUGHT

Environmental Studies

- International Environmental Politics (undergraduates)
- Sustainable Development in the Tropics --Conservation and Development (undergraduates)
- Environmental Politics (undergraduate)
- Introduction to Environmental Studies (undergraduates)

Public Policy

- Policy Formation & Implementation (undergraduate & graduate level)
- Policy Analysis (undergraduates)

Methods

- Policy and Program Research: research design and intro to statistics (undergraduate & graduate level)
- Senior Synthesis /capstone (undergraduate)

SERVICE

I. Service to University & College of Arts & Sciences

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| 2019 | Undergraduate Research on NSF project. Training 4 students to conduct research in Ecuador for summer 2019. |
| 2017-present | President's Committee for Sustainability (member) |
| 2016 | CETL Panelist for session on conducting research with students |
| 2015-2018 | College of Arts and Sciences, Ranks and Tenure Committee |
| 2015-present | Faculty reviewer of Fulbright proposals |
| 2014 | Undergraduate Research on NSF project. Training 3 students to conduct research in Ecuador for summer 2014. |
| 2013-present | Proposal Writing Workshop for Fulbright Applicants (yearly), Office of Fellowships. |
| 2014 | Book discussant for New Student Convocation |
| 2013 | Roundtable discussant for Global Engagement Panel |
| 2012 | Book discussant for New Student Convocation |
| 2012 | Presentation on undergraduate scholarship for College of Arts & Sciences donor breakfast |
| 2012 | Guest Speaker, Just Serve retreat for Garfield High school Students, April 14, 2012 |
| 2011-2012 | Mentor of National Council of Undergraduate Research (NCUR) project |
| 2011 | Undergraduate research in Ecuador (mentored 2 students) |
| 2011 | Guest Speaker, Oxfam Hunger Banquet, March 7, 2011 |
| 2011 | Book discussant for New Student Convocation |
| 2010-present | Faculty representative for Udall Scholarship and environmentally-related fellowship opportunities. |
| 2010-2011 | Participant in Justice Seminar on Duwamish River |

2010	Exploration of collaboration possibilities with faculty at University of Javeriana, Bogota in support of Seattle University Twinning Agreement between the Jesuits of the Provinces of Oregon and Colombia
2010	Western Conversations Jesuit Universities Seminar on Sustainability, Santa Clara, CA, Oct 22-24, 2010.
2009	Workshop Instructor, “Building Collaborative Partnerships in Conservation”. As part of student-organized inter-collegiate conference, <i>Collaborating for Sustainability: Empowering Students for New Generation</i> , March 2009.
2008-2012	Faculty Advisor, Friends of Nicaragua student group
2008	Guest speaker, <i>Green/Pink Summit on Reproductive Justice and Environmental Sustainability</i>
2007-2009	University Environmental Advisory Committee member

II. Service to Institute for Public Service & Environmental Studies Program

2019-present	Coordinator for EVST partnership with Beacon Food Forest
2018	Search committee IPS PUBA TT position
2018	Search committee IPS MPA TT position
2017	IPS promotion and tenure review committee
2017	Search committee chair, EVST TT position
2017-present	Director, Environmental Studies Program
2014-2017	Director, Public Affairs Program
2014-present	Coordinator for quarterly brown bag research lunches, IPS
2012-2013	Assessment lead for Public Affairs learning outcome
2011-2012	Search Committee for Director of IPS
2011-2012	Public Affairs curriculum revisions
2010-2011	Public Affairs assessment planning
2010-2011	Search Committee for Director of IPS
2010	Teagle workshop participant, Environmental Studies
2009-2011	By-laws Committee for IPS
2009-2010	Search Committee for Visiting Prof in Public Administration
2007-present	Environmental Studies Advisor (20-25 students previously; now advise 40+)
2007-2010	EVST faculty representative at Fall Preview Days and Academic Opportunity Fairs

III. Service to External Communities

2018-2018	Faculty mentor to high school student participating in Central Sound Regional Science and Engineering Fair.
2014	Presentations of project findings “Participación Comunitaria y Conservación de Páramo en la Sierra Ecuatoriana” to three international and two national (Ecuadorian) NGOs.
2014	Community-workshops in 12 Andean communities on ecotourism and their páramo management
2014	Presentation of Preliminary Findings to Socio Bosque
2010	Program evaluation of Payment for Ecosystem Services program to NGO Fundación Natura

- 2009 Report to Colombian Regional Environmental Authority (CAR) on forest use in Robledal Forest Reserve
- 2008 Program evaluation of protected area management plan for Honduran Ministry of Forestry and The Nature Conservancy
- 2006 Provision of land-cover change maps of indigenous territories in Rio Plátano and Bosawas to indigenous communities in Mosquitia Coast, Honduras and Nicaragua

IV. Service to Professional Field

- 2019 Panel organizer. “Understanding local outcomes of conservation initiatives in the context of multi-level social, economic and environmental change” for XVII Biennial IASC Conference, Lima, Peru July 1-5.
- 2019 Panel co-organizer with Driss Ezzine de Blas. “Payment for Environmental Services and collective action: Theoretical insights & empirical evidence of effects, impacts and interactions” for XVII Biennial IASC Conference, Lima, Peru July 1-5.
- 2018 Panel co-organizer with Kathleen Farley. “Assessing the Social Implications of Payment for Ecosystem Services (PES) in the Commons” working group at IASC Workshop: ‘Working Together on the Commons’, Tempe AZ, March 8-9.
- 2014 Panel co-organizer with Lauren Persha. “Empirical Assessment of Complex Social-Ecological Systems: Methodological frontiers for measuring complexity and change in sustainable resource management” working group at fifth ‘Workshop on the Ostrom Workshop’ (WOW 5), Indiana University, Bloomington June 18-21.
- 2014 Discussant, “Institutions, Behavior, and Policy Outcomes” at fifth ‘Workshop on the Ostrom Workshop’ (WOW 5), Indiana University, Bloomington June 18-21.
- 2010 Discussant, “Direct Rent Capture in the Context of Weak Institutions” by John Dixon. Presented at Lincoln Land Institute Conference on the Environmental, Climate Change and Land Policies, Lincoln Institute of Land Policy, Cambridge, MA, May 24-25.

External Reviewer

Grant Proposals: National Science Foundation; 3ie International Initiative for Impact Evaluation; Research Foundation Flanders (FWO)

Undergraduate Research: NCUR proceedings reviewer

Manuscript Reviewer for Journals:

Conservation and Society	International Journal of the Commons
Conservation Letters	Journal of Latin American Geography
Ecological Economics	Journal of Environmental Planning & Management
Environmental Conservation	Landscape and Urban Planning
Environmental Science and Policy	Land Use Policy
Human Ecology	Policy Sciences
Forest Policy and Economics	Policy Studies Journal
Forest Research	Society and Natural Resources
Forests	United Nations Natural Resource Forum
Geoforum	World Development

