

Natural Capital Symposium



Registration for the **Natural Capital Symposium** is now open! The event will take place from March 23-25 on Stanford Campus.

There will be multiple tracks during our three-day event, focusing on our approach, our science and tools, and the challenges ecosystem services practitioners face in engaging with decision-makers, stakeholders, and the public at large.

Calls for Proposals

Deadlines

Poster Session: check appropriate box during registration and submit poster proposal by February 28, 2015

Sessions, Panels, Talks, and Exchange Workshops: proposals must be submitted by January 15, 2015

**Proposals will be considered on a rolling basis, and spots are limited, so participants are encouraged to submit abstracts as soon as they are ready, before the deadline.*

Poster Session

All attendees are invited to submit proposals for posters for the Natural Capital Symposium's open poster session. Posters are limited to 48" x 48" in size. Wide-ranging topics in natural capital and ecosystem services are welcomed. Select posters will also be chosen for Poster Review sessions held in the Symposium's Learning

NatCappers Get The Word Out In Nature

BIG RESPONSES FROM AROUND THE WORLD

The recent [Nature](#) commentary by **Heather Tallis** and 239 other signatories - including **more than a dozen Nat Cappers** -

took a big step toward mainstreaming the ideas that drive the Natural Capital Project's approach. By linking vehement pockets of resistance to the nature-for-people approach to a dearth of diverse voices in conservation, the essay generated widespread attention.

Calling it "an extraordinary letter" [The Guardian](#) neatly articulates a question central to Nat Cap's work: "Why should people care about nature?"

An engaging article in [ClimateWire](#), re-published on [Scientific American's](#) website, promotes the idea that focusing on nature's value to humans represents a "**New Conservation**" movement, and recounts several case studies underway, including Tallis' efforts to correlate students' standardized test scores with the presence of nature, using satellite data.

The [Nature Conservancy's Cool Green Science](#) blog highlights one of NatCap's three pillars, or pursuits: "We also need to focus more on building the evidence base for conservation," Tallis says, "so we can move away from these abstract debates toward knowledge of what really solves problems and creates change on the ground."

The letters' messages were also picked up and reiterated on various college campuses, from the [Indiana Daily Student](#), to [Washington State University](#) to the [University of California, Santa Cruz newsletter](#), which summarizes the main points: to raise "the voices of women and men from around the world in support of a unified and diverse conservation ethic that recognizes and accepts all values of nature from intrinsic to instrumental."

Since the essay came out, Tallis has been inundated with emails from people she's never met, thanking her for writing. "The reactions that I've gotten directly have been really positive," Tallis says. She next envisions creating a forum at <http://diverseconservation.org> where people from around the world could submit self-made videos about why nature and conservation are important to them. "So we can get faces from Indonesia, faces from Argentina, faces from Pakistan—so that we can give more people access [to the conversation]."

A thoughtful interview with co-author **Jane Lubchenco** posted to [Yale](#)



*Willie Atu (on left), reviewing a map of conserved and threatened areas of the Solomon Islands with the Mothers Union, a group of Kia women who have worked with The Nature Conservancy to raise conservation awareness.
Photo © Bridget Besaw/TNC.*

Exchange, during which presenters will give short talks on their posters and share ideas with other people who have similar interests. If you are interested in submitting a poster proposal, check the appropriate box on the registration form and you will be sent additional information on where and by when to send your proposal. Poster proposals must be submitted by February 28, 2015.

Session Proposals

We hope that this meeting can serve to bring together a community of practice around the theme of ecosystem service understanding informing decisions. In the "Training" track at the Symposium, attendees can learn about NatCap's approach and how to use our open-source tools in hands-on sessions with trainers. In the "Pathways to Impact" and "Learning Exchange" we hope to foster dialogue, encourage collaboration, and learn from one another as a community. In this spirit, we are inviting proposals for sessions to take place in the "Pathways to Impact" and "Learning Exchange" tracks at the Symposium.

Sessions will be 90 minutes in length, with approximately 1 hour for presentations and 20 minutes for Q&A and discussion.

Variations on that basic form are welcome. To propose a session, please send a <2 page description of your session that includes the participants, presenters, and/or panelists involved to

training@naturalcapitalproject.org with NCS 2015 Session Proposal in the subject line. Your proposal should include the ecosystem services that are addressed, the geographic region in which you are working, what tools you have used or are using for ecosystem service assessment, and the major questions that you are seeking to answer or hoping to receive input about from audience members. Please submit your proposal by January 15, 2015.

Panel Participation and Contributed Talks

As a part of our "Pathways to Impact" series of sessions, we are looking for panelists and presenters who can share their experiences in engaging stakeholders, getting ecosystem services into policy decisions, and communicating their analyses with diverse audiences. Pathways to Impact will be structured around four primary decision contexts: Coastal Defense & Resilience, Infrastructure & Permitting, Water Funds Monitoring & Evaluation, and Ecosystem-based

[Environment 360](#) highlights the letter's intent, to validate the legitimacy of multiple rationales for conservation. "The impression that many younger people in this field got was that the individuals who were articulating that were taking a 'it's my way or the highway' approach."

This debate was replayed live Nov. 14 at the **Western Society of Naturalists** annual meeting in Tacoma, Wash., where **Michael Soulé** raised his concern that the **Anthropocene** represents "a negation of humanity's ethical compass." "It isn't inevitable that all the nooks and crannies where wildness and wild creatures persist will be crushed by ATVs or other gas toys," he writes in his abstract. "Enough wildness and beauty remain to reanimate the world, if we love it enough. It is still possible."

Peter Kareiva also spoke about opportunity and possibility: "Now is the most exciting time ever to be a conservation scientist," his abstract says, "because so much is possible given the data and technology and awareness available, and yet so much is on the cusp of being lost - both spiritually and materially, depending on the choices."

With an eye towards reaching younger members of the audience, **Katie Arkema** described the research frontiers. "While this concept of ecosystem services has been around for some time, its utility for informing "on-the-ground" decisions has rarely been tested, especially in marine environments," Arkema said.

Videos of the talks have since been posted to [Vimeo](#) and both the **New Yorker** and **High Country News** are doing write-ups about the ongoing debates.

After a panel discussion, streams of students approached Arkema, asking for advice. "A lot of young scientists there are thinking about how their work can contribute," Arkema said. "How can I design research questions? How can I think about framing my approach, for nature and people?"

Environmental Solutions: Informing Coastal Zone Management in Belize

A WIN-WIN FOR PEOPLE AND THE ENVIRONMENT

Natural Capital Project was featured earlier this month at the [Stanford Woods Institute for the Environment's 10th anniversary symposium](#) as a model of "next generation environmental solutions." NatCap Managing Director **Mary Ruckelshaus** was joined by **Belize Coastal Zone Management Authority and Institute (CZMAI) Director Chantalle Clarke-Samuels** and others in a roundtable discussion to talk about our collaboration with CZMAI to inform coastal zone management in Belize.



Belize CZMAI Director Chantalle Clarke-Samuels visiting with NatCap Managing Director Mary Ruckelshaus before speaking at the Stanford Woods Institute for the Environment's 10th anniversary symposium.

We began our work with CZMAI and the **World Wildlife Fund** in Belize in 2010, with the aim of creating an Integrated Coastal Zone Management Plan (ICZMP) to help guide future coastal zoning and permitting along the Belizean coast. Natural habitats such as mangroves and coral reefs

Management. If you are interested in participating in a panel discussion or presenting your work, please email a short (< 1 page) abstract of your proposed contribution to training@naturalcapitalproject.org with Pathways to Impact and the decision context in the subject line by January 15, 2015.

Learning Exchange

The Learning Exchange will offer a variety of opportunities to work in small focus groups with NatCappers as well as practitioners from other organizations, including model-specific small-group workshops, poster sessions, focused discussion groups, panel discussions, and more. This will be a great opportunity to seek out new collaborations with NatCap and many other organizations and individuals who will also be in attendance. During the Learning Exchange, there will be many opportunities to discuss your work with NatCappers, as well as representatives from many of our partner organizations. Sign-up sheets will be available during registration to participate in "sandbox sessions" during which participants will be able to do hands-on work with specific models and their own questions with NatCap researchers, analysts, and software engineers. We are also looking for technical workshops on other software modeling tools. If you have a proposal for a Learning Exchange proposal, please email a < 1 page abstract to training@naturalcapitalproject.org before January 15, 2015.

[Register today!](#)

Software Tools



InVEST is a free and open-source software suite developed by the Natural Capital Project. [InVEST 3.1.0](#) was released on November 20, 2014.



RIOS is a software tool that helps design cost-effective investments

provide many services to the people of Belize including coastal protection, tourism, and food production. NatCap and partners worked to map and value coastal and marine ecosystem services, and consulted stakeholders to understand how coastal habitats were being used in an effort to limit habitat degradation while maintaining benefits provided by natural habitats.

A new [study](#) from NatCap, CZMAI, and WWF, resulting from our work in Belize, was published in the journal *Environmental Research Letters* on November 18th. The study shares new science and software that were developed to calculate risk of habitat degradation in marine and coastal ecosystems, and were used to design Belize's first national ICZMP. Results from the study suggest that the plan will reduce the area of marine habitat at high risk from damaging activities by 20%, while tripling the area available for coastal development, doubling space for marine aquaculture, and reducing controversial oil exploration and dredging. NatCap's [Habitat Risk Assessment Model](#) was used during the process and is available in our [InVEST](#) software. It is free and open source and can be used by coastal planners anywhere to help inform marine and coastal management.

Please [CLICK HERE](#) to learn more about the study!

Free Online Course From Stockholm Resilience Centre Open Now!

"PLANETARY BOUNDARIES AND HUMAN OPPORTUNITIES"

Our good friends at the [Stockholm Resilience Centre](#) have partnered with the [Sustainable Development Solutions Network](#) to launch a Massive Open Online Course (MOOC). The course, "[Planetary Boundaries and Human Opportunities: The Quest for Safe and Just Development on a Resilient Planet](#)," explores a number

Online course: Planetary Boundaries and Human Opportunities

of sustainability concepts including the Anthropocene, the social-ecological systems approach, and resilience thinking.

The course runs from November 17, 2014 to January 12, 2015. New course materials will be released each Monday and will remain available for the duration of the course. Please [CLICK HERE](#) to learn more about the course and to enroll today!

Recently, we launched our first MOOC [NCP-101: An Introduction to the Natural Capital Approach](#), and we are proud to say that we have almost 1500 enrollees, representing a total of 116 countries. This self-guided course, which is divided into four modules and takes about 4 hours to complete, introduces concepts of the natural capital approach with real world examples from our work in Belize and Colombia, highlighting key methods and tools used during implementation. Our course also provides an in-depth introduction to our InVEST software and offers insight on how to effectively summarize model outputs and communicate those outputs to decision-makers and stakeholders.

To register for NCP-101: An Introduction to the Natural Capital Approach, visit ncp101.class.stanford.edu.

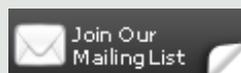
in watershed services. [RIOS 1.0.0b8](#) was released on November 6, 2013.

For help using InVEST and RIOS, visit the [NatCap Forums](#), our online user community.

Newsletter Archive

Check out NatCap's previous newsletters in our [Newsletter Archive](#).

Follow Us Online



Recent Press and Publications

[Assessing habitat risk from human activities to inform coastal and marine spatial planning: a demonstration in Belize article](#)

Arkema, Katie K.; Gregory Verutes; Joanna R. Bernhardt; Chantalle Clarke; Samir Rosado; Maritza Canto; Spencer A. Wood; Mary Ruckelshaus; Amy Rosenthal; Melanie McField; Joann de Zegher.
Environmental Research Letters. November 18, 2014, Vol. 9(11), 114016.
doi:10.1088/1748-9326/9/11/114016

[Risk and Results in Belize](#)

WWF Science Driven Blog, November 19, 2014, by Katie Arkema & Amy Rosenthal

[Working together: A call for inclusive conservation](#)

Tallis, Heather; Jane Luchenco.
Nature. November 6, 2014, Vol. 515, pp 27-28. doi: 10.1016/j.gecco.2014.09.001

[Celebrating 10 years of environmental solutions at Stanford](#)

Stanford Report, November 10, 2014, by Job Jordan

[Open letter to Nature calls out polarized debate in conservation](#)

Indiana Student Daily, November 9, 2014

[Leading Conservationists call for a "unified and diverse conservation ethic"](#)

UC Santa Cruz NewsCenter, November 5, 2014, by Tim Stephens

[Sensitivity analysis of a sediment dynamics model applied in a Mediterranean river basin: Global Change and management implications](#)

Sánchez-Canales, M.; A. López-Benito; V. Acuña; G. Ziv; P. Hamel; R. Chaplin-Kramer; F.J. Elorza.
Science of The Total Environment. January 1, 2015, Vol. 502, pp 602-610. doi: 10.1016/j.scitotenv.2014.09.074

[Exploring Scenarios of light pollution from coastal development reaching sea turtle nesting beaches near Cabo Pulmo, Mexico](#)

Verutes, Gregory M.; Charles Huang; Ricardo Rodríguez Estrella; Kara Loyd.
Global Ecology and Conservation. December 2014, Vol. 2, pp 170-180. doi: 10.1016/j.gecco.2014.09.001

[Private Incentives for the emergence of co-production of offshore wind energy and mussel aquaculture](#)

Griffin, Robert; Bela Buck; Gesche Krause.
Aquaculture. Available online November 5, 2014.
doi:10.1016/j.aquaculture.2014.10.035

[Process matters: a framework for conducting decision-relevant assessments of ecosystem services](#)

Rosenthal, Amy; Gregory Verutes; Emily McKenzie; Katie K. Arkema; Nirmal Bhagabati; Leah L. Bremer; Nassar Olero; Adriane L. Vogl.
International Journal of Biodiversity Science, Ecosystem Services & Management. Published online November 5, 2014.
doi:10.1080/21513732.2014.966149

[Why Conservation Should Embrace a Diversity of People & Values](#)

Cool Green Science, November 5, 2014, by Heather Tallis

[Pandas and agricultural best practices at lonE](#)

UMN Institute on the Environment News, October 28, 2014, by Monique Dubos

A full list of [news stories](#) and [publications](#) are available on our website. Access to full articles may require library access.

Thank you for your continued interest in the Natural Capital Project. Please feel

free to contact us at invest@naturalcapitalproject.org. For comments or questions about the newsletter, please contact Stacey Solie at slsolie@stanford.edu.

