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State of Private Investment in Conservation 2016

A Landscape Assessment of an Emerging Market

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This report was made possible by the generous financial support of JPMorgan Chase & Co., the Gordon and Betty Moore Foundation, and The David and Lucile Packard Foundation.

We also thank Doug Petno, CEO, Commercial Banking and Matt Arnold, Global Head of Sustainable Finance at JPMorgan Chase for their leadership and vision in making this report series a priority.

The 2016 survey benefited in particular from the input and guidance provided by Renee Cheung, Bonterra Partners, who was critical in providing support for this survey's data analysis.

We wish to express our gratitude to our 159 survey respondents and others who generously gave of their time to share their data and insights.

Advisory Committee

Layout and graphics by Clarise Frechette Design, LLC (www.clarisefrechette.com)

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December 2016

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About Forest Trends' Ecosystem Marketplace

Ecosystem Marketplace, an initiative of the non-profit organization Forest Trends, is the leading global source of information on environmental finance, markets, and payments for ecosystem services. As a web-based service, Ecosystem Marketplace publishes newsletters, breaking news, original feature articles, and annual reports about market-based approaches to valuing and financing ecosystem services. We believe that transparency is a hallmark of robust markets and that by providing accessible and trustworthy information on prices, regulation, science, and other market-relevant issues, we can contribute to market growth, catalyze new thinking, and spur the development of new markets, and the policies and infrastructure needed to support them. Ecosystem Marketplace is financially supported by a diverse set of organizations including multilateral and bilateral government agencies, private foundations, and corporations involved in banking, investment, and various ecosystem services.

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Foreword

JPMorgan Chase is committed to building a strong market for conservation finance, because we understand the critical role the natural environment plays in our economy and our communities. As ecosystems come under greater stress, the urgency of creating innovative and scalable investment vehicles to channel capital to the environment becomes all the more important. We also believe that effective market building and investment necessitate a structured understanding of the target market.

This is the second in a series of data-driven reports that characterize the landscape of investment across three fundamental conservation sectors: sustainable food and fiber production, habitat conservation, and water quality and quantity. JPMorgan Chase has spent several years working with the partners on this report to dig deeper, expand the data set, and promote thoughtful analysis on the nature and experience of private capital invested for conservation impact.

The collaboration represented in this work is significant in highlighting the shared conservation objectives of a diverse range of institutions. Together with our Advisory Committee partners—The Nature Conservancy's NatureVest unit, Encourage Capital, The David and Lucile Packard Foundation, the Gordon and Betty Moore Foundation, Cornell University, and Credit Suisse—JPMorgan Chase commends Forest Trends' Ecosystem Marketplace on their leadership role in producing this report.

We believe the findings are encouraging: the amount of private investment in conservation is growing, and a wider range of investors is participating in the market. Investment models are spreading geographically, and institutions that support the market are becoming more sophisticated. It's also striking to note that investors report they are achieving their blended goals of conservation impact and financial return. Important questions about how to scale these models still require our attention, and we invite you to participate in the ongoing dialogue on our shared work.

We hope you will agree that this report serves as an important contribution to the development of the conservation finance marketplace.

Doug Petno
CEO, Commercial Banking, JPMorgan Chase & Co.
Vice Chair, Advisory Board, NatureVest

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Executive Summary

Conservation investing—intentional investments in companies, funds, and organizations with the goal of generating both a financial return and a measurable environmental result—is growing dramatically. In just two years, the total private capital committed to conservation investments jumped by 62%, to a total committed private capital of $8.2 billion (B)[1] tracked from 2004 to 2015.

This is but one of several findings from the second report examining private investment in conservation, following and building upon the 2014 report *Investing in Conservation: A landscape assessment of an emerging market.*[2] This report is offered as the newest in a growing body of research to demonstrate the size, scope, and trends in new and increasing investments in sustainable forestry, agriculture, fisheries, habitat, and water.

The study was prepared for a range of audiences, including institutional investors, high-net worth individuals and family offices, pension fund managers, insurance companies, diversified financial institutions, and endowment and foundation asset managers. The analysis shines a light on the opportunities and experiences to date in private investment in conservation with the hope that the resulting knowledge helps to spur increased financing for conservation of forests, water, and biodiversity.

Defining Conservation Investment

For the purposes of accurately documenting the state of private capital committed to conservation, "conservation investments" were defined as:

> *Investments intended to return principal or generate profit while also resulting in a positive impact on natural resources and ecosystems. In addition, conservation impacts must be the intended motivation for making the investment; they cannot be simply a by-product of an investment made solely for financial return.*

Additionally, the survey focused strictly on the following three groups of conservation-oriented investments:

1. **Sustainable food and fiber production** (including forestry, agriculture, fisheries, and more)
2. **Habitat conservation** (including mitigation banking, forest carbon trading, and more)
3. **Water quality and quantity protection** (including watershed protection, water rights trading, and more)

Investors Surveyed

This study was based on a survey of investors, supplemented by interviews and case studies. The survey was carried out from May to August 2016 and gathered detailed transaction, financial return, and conservation impact data from 128 banks, companies, fund managers, family offices, foundations, and non-governmental organizations directly investing in conservation. In-depth interviews were carried out with 31 additional representatives from these and other organizations to supplement the data with case study examples, emerging developments, and areas of opportunity.

Fund managers comprised most of the respondents, followed by corporations (many representing companies that invest in projects or real estate). Not-for-profit organizations (foundations and non-governmental organizations) made up the next level of respondents. While a handful of pension funds are known to be investing into conservation funds or companies, none responded to this survey.

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[1] In this report, all monetary values are in US dollars ($), unless otherwise noted.

[2] EKO Asset Management Partners and NatureVest, *Investing in Conservation: A landscape assessment of an emerging market* (Arlington, VA and New York: The Nature Conservancy and EKO Asset Management Partners, 2014), http://www.naturevesttnc.org/pdf/InvestingInConservation_Report.pdf. EKO Asset Management Partners is now Encourage Capital.

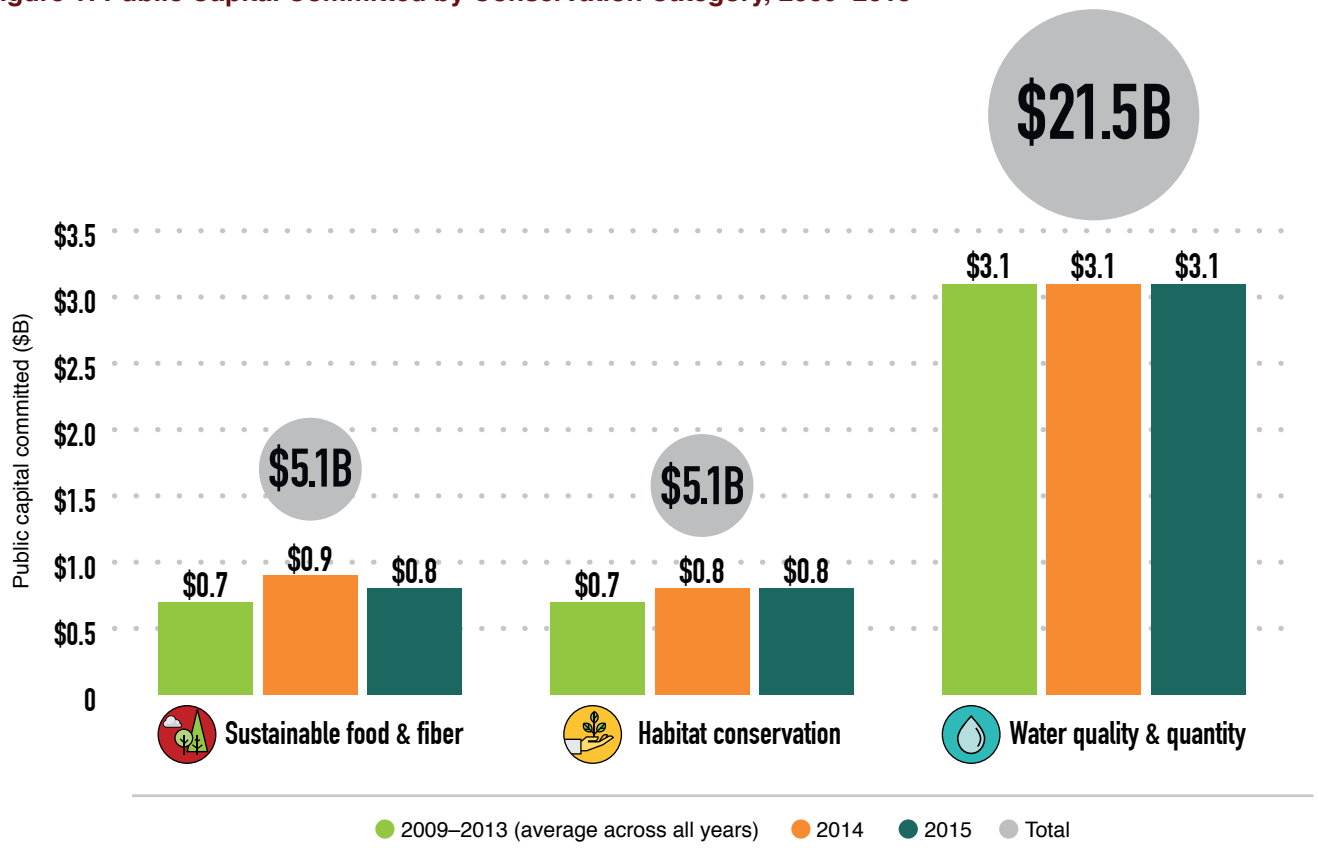
Summary of Observations

While the survey collected data from both public and private organizations, *public investment data was separated from private investment data except for one high-level figure*. The public investment data is provided at the beginning of the report findings to provide a sense of scale in relation to private capital committed and to recognize that private investment data is often entwined with or embedded in government investments or policies.

Public capital flows to conservation investments totaled $31.7B from 2009 to 2015

Private investment in conservation is growing, but it remains dwarfed by public investment. This report tracked a total of $31.7B in public capital committed between 2009 and 2015, up from $21.5B committed between 2009 and 2013 as stated in the 2014 report. A small number of development finance institutions dominated these investments, which likely represented a minimum of public investment in this space.

Figure 1: Public Capital Committed by Conservation Category, 2009–2015

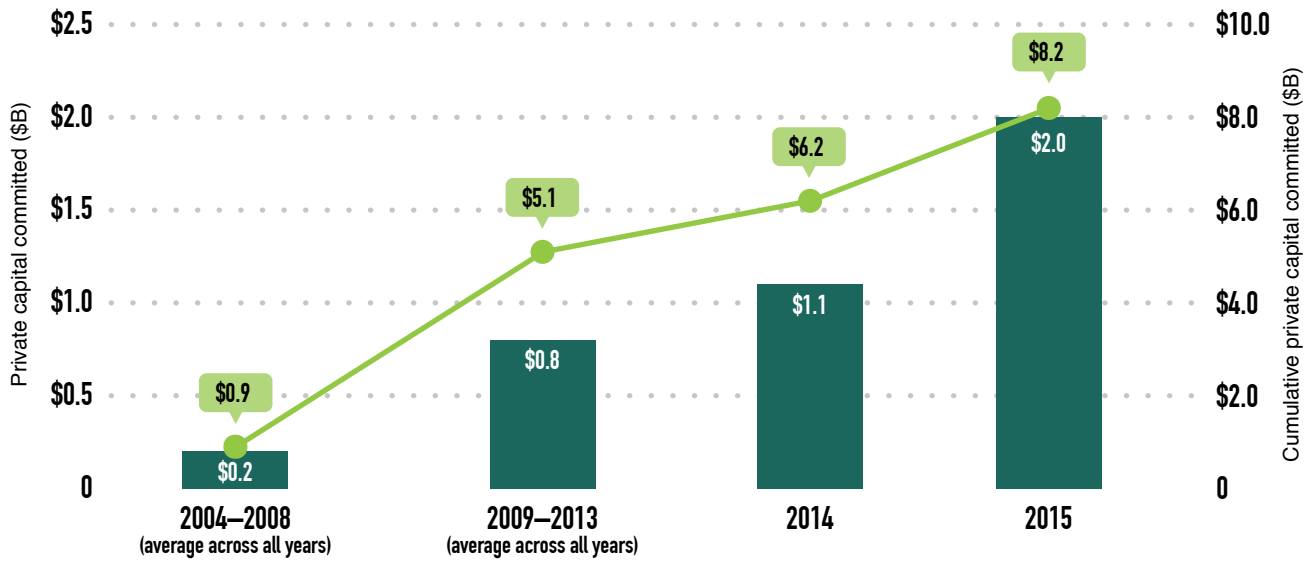


Note: Based on responses by 6 public organizations. Numbers may not add up to the totals due to rounding.

Private capital flows to conservation investments totaled $8.2B from 2004 to 2015

Respondents reported a total of $8.2B of private capital committed between 2004 and 2015, up considerably from the $2.8B of private investment stated in the 2014 report, as well as from the updated number of $5.1B from the 2016 survey. Survey results showed that investors, on average, committed more capital to conservation in 2014 and 2015 than in previous years. For example, this report tracks private investors committing, on average, $0.8B/year between 2009 and 2013. That average doubled in the last two years, as investors reported committing $1.6B/year in capital from 2014 to 2015.

Figure 2: Private Capital Committed Across All Tracked Years, 2004–2015

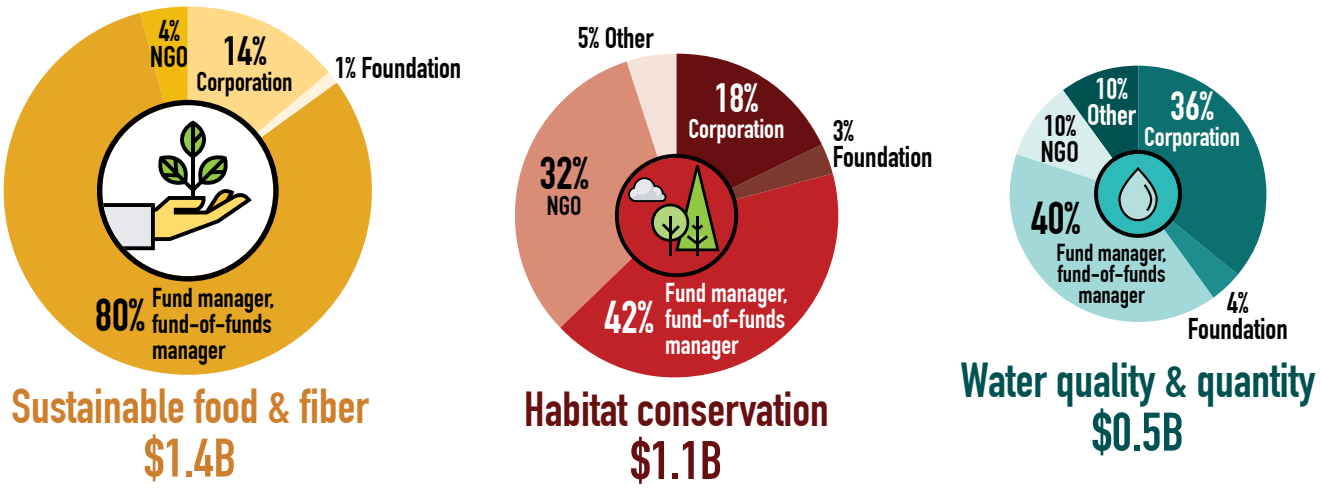


Note: Based on responses by 98 private organizations that reported making conservation commitments out of the total 128 organizations responding to the survey.

Future commitments: Another $3.1B remained undeployed by current investors

Though private capital committed surged to a new high of $8.2B, investors were still looking for deals with a reported $3.1B undeployed at the end of 2015. This is more than double the amount reported in the 2014 report ($1.5B). All but three respondents said that they planned to raise or reallocate more capital towards conservation investments in the next three years (2016–2018) than they committed in 2013–2015.

Figure 3: Already-raised Capital that Respondents Intend to Deploy in 2016–2018 by Conservation Category and Organization Type



Note: Based on 35 responses by organizations reporting un-invested capital in sustainable food and fiber, 27 by organizations reporting un-invested capital in habitat conservation, and 17 by organizations reporting un-invested capital in water quality and quantity.

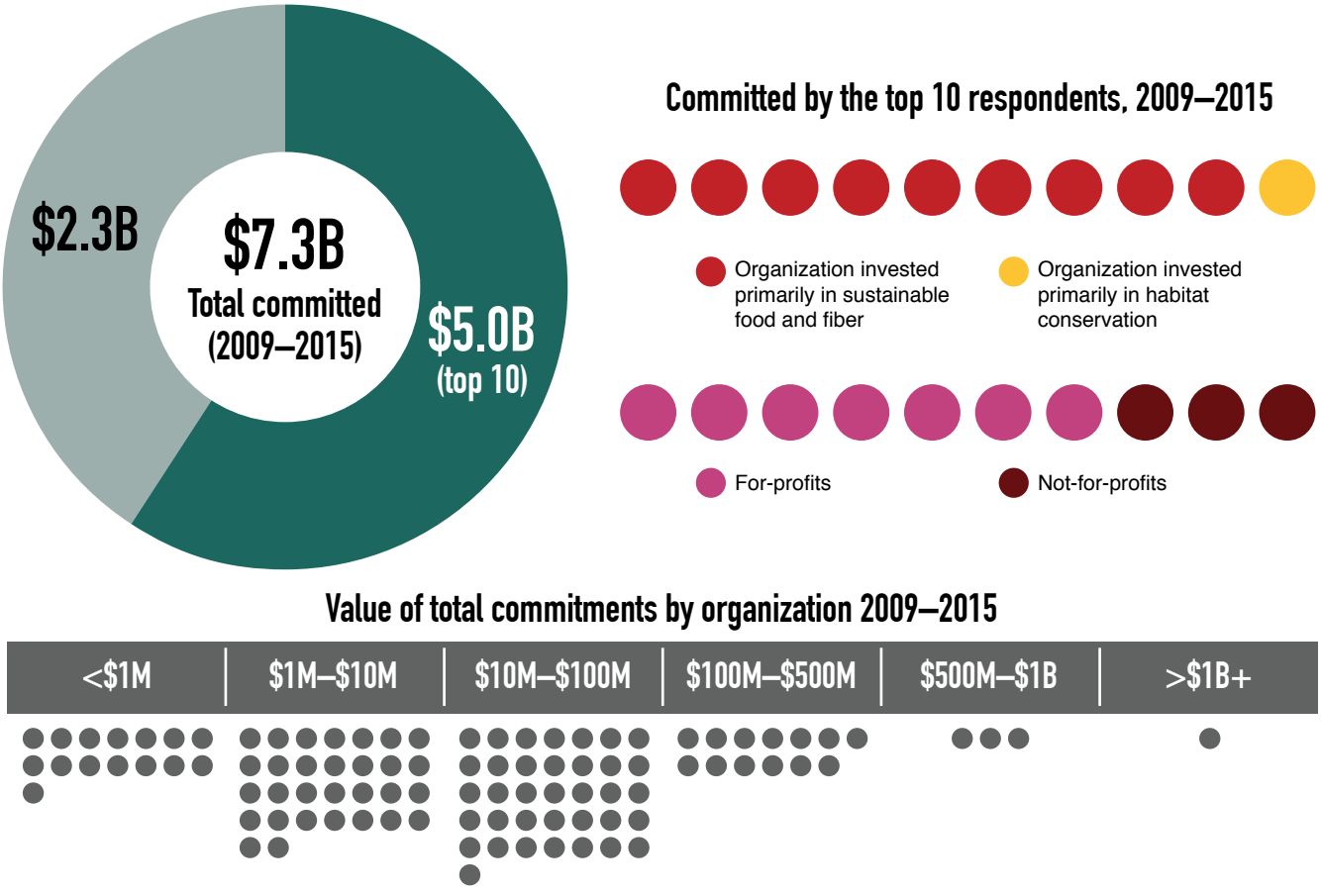
The 2016 report collected data from more than double the respondents and tracked nearly three times the amount of capital committed than in the 2014 report

Of the total 128 respondents to the survey, 98 investors and fund managers provided detailed transaction data about their capital committed. This was more than double the number (43) of private investors that shared this information in 2014. The greater response rate was at least one factor behind the finding that the $8.2B tracked across all years represents more than three times the amount of capital ($2.8B) tracked in the 2014 report.

The top 10 investors across all years accounted for 66% of tracked private capital, primarily invested in sustainable food and fiber production

In the 2014 report, the top 10 investors accounted for 80% of private capital committed between 2009 and 2013. With the addition of data from new respondents in 2016, this percentage decreased from 80% to 68%, suggesting a more even distribution of investment among respondents. However, the original trend re-established itself in the most recent years: the top ten investors made up 80% of all capital committed in 2014 and 86% of all capital committed in 2015.

Figure 4: Profile of Respondents by Capital Committed, 2009–2015



Note: Based on responses by 98 private organizations that reported making conservation commitments out of a total of 128 organizations responding to the survey.

Sustainable food and fiber production continued to attract the majority of capital committed

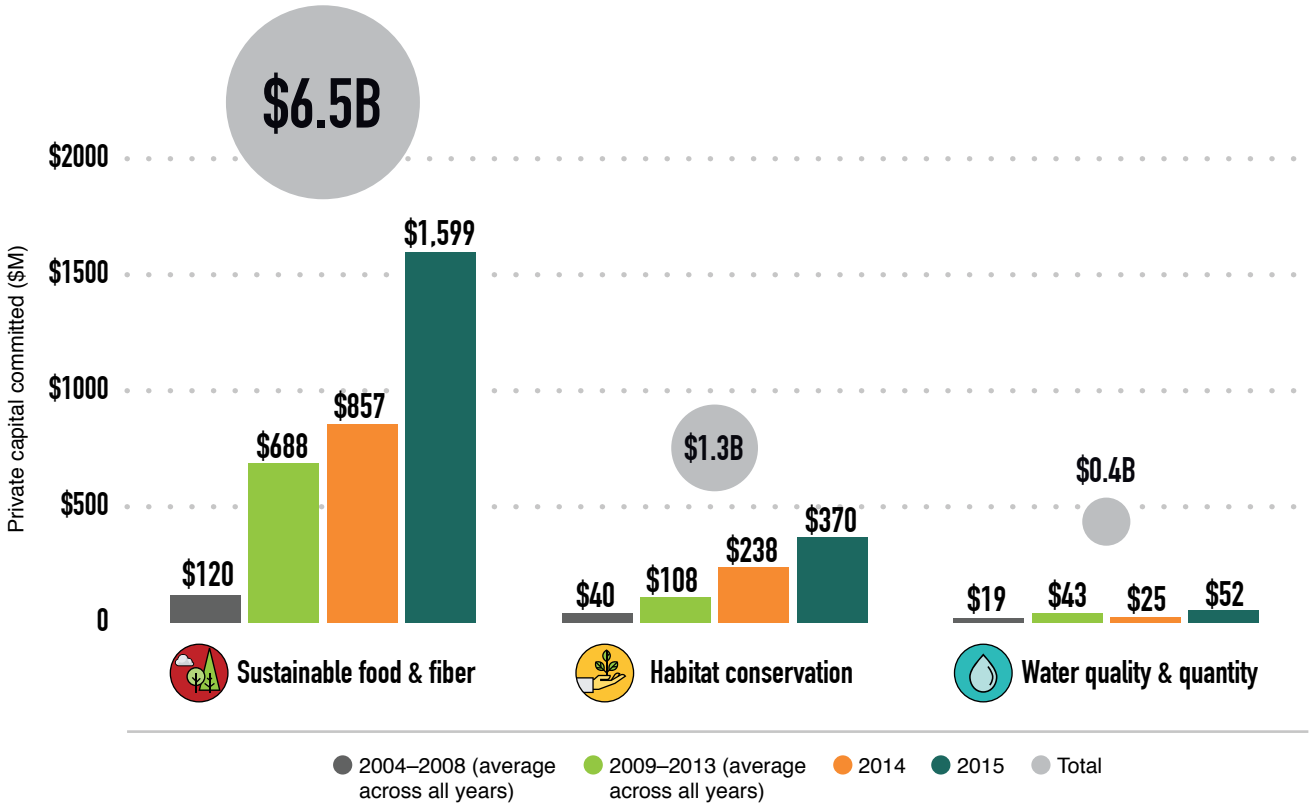
Investors reported committing $6.5B in capital towards sustainable food and fiber production across all years (2004–2015), nearly four times as much as capital reported in the habitat conservation, and water quality and quantity categories combined. Investors directed the bulk of their capital towards sustainable forestry and

sustainable agriculture, which made up 44% and 32% of all capital invested across all three conservation categories, respectively. While investments in sustainable forestry increased the most between 2014 and 2015, the large jump was due primarily to a single organization's investments.

Habitat conservation: Investors favored US-based real asset acquisition

Organizations investing in habitat typically favored real asset investments, with almost half (48%) of habitat conservation capital committed towards direct land ownership and another 12% directed towards land easements, a popular tool for conservation in the United States due to tax incentives. Capital committed towards forest carbon or mitigation banking, which rely partly on the sale of environmental credits for revenue, constituted slightly smaller sub-categories, totaling 10% and 28% of capital committed respectively. While the bulk (79%) of all habitat conservation investments remained in the United States, most international investments were made in environmental credits.

Figure 5: Annual Private Capital Committed by Conservation Category, 2004–2015



Note: Based on responses by 98 private organizations that reported making conservation commitments out of a total of 128 organizations responding to the survey.

Water quality and quantity: No clear sign of growth yet; investors committed smaller amounts of capital totaling 5% of all conservation investments tracked

Fewer organizations reported making water quality and quantity investments, compared to sustainable food and fiber production or habitat conservation investments. Many of those who provided capital, did so under a larger umbrella investment that spanned multiple conservation categories, such as an investment into landscape restoration, which directed some capital towards stream restoration. Over half (53%) of capital committed towards water quality and quantity went into the self-described "other" sub-category, with respondents choosing more general terms of "water quality" and "water conservation" than any of the more specific sub-category options.

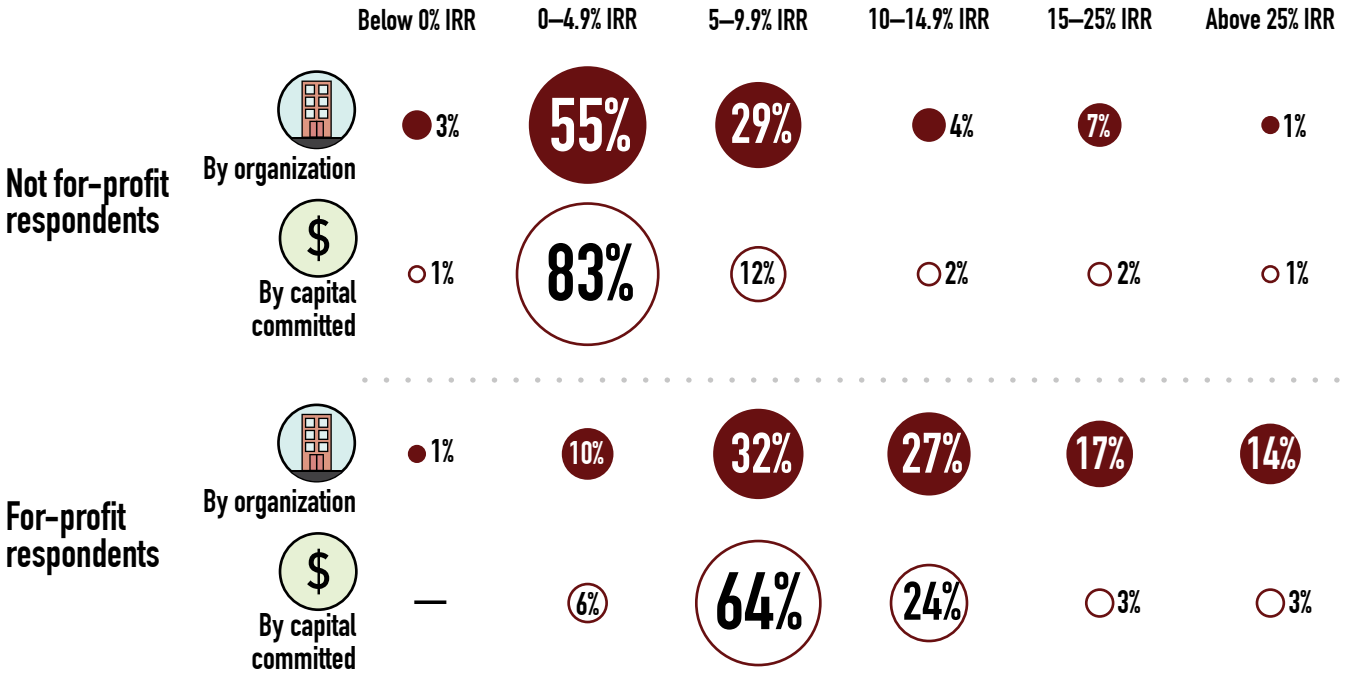
The majority of respondents were based in North America and Europe, but an increasing amount of investment moved to other continents

Organizations headquartered in North America supplied nearly two-thirds of all responses, with the bulk of remaining responses from Europe, and a few responses from Africa, Asia, and Latin America. Although headquarters largely remained in developed economies, a significant amount of investment has pushed into emerging economies, especially into sustainable forestry investments in Latin America and Africa. In particular, findings showed a four-fold increase in investment in Latin America (from an average of $107M/year between 2009 and 2013 to $538M/year between 2014 and 2015).

Average target internal rate of return remained in the range of 5% to 9.9%

While nearly a third of all respondents (31%) anticipated returns between 5 and 9.9%, return expectations were split depending on an organization's profit status. Over half of not-for-profit respondents (55%) expected a smaller return, between 0 and 4.9%. Meanwhile, the slim majority of for-profit respondents (32%) cited 5–9.9% as the most common expected return, followed by 10–14.9% (27%). Only 10% anticipated a return of less than 5%, while the remaining 31% anticipated returns of 15% or more.

Figure 6: Projected Internal Rate of Return by Organization and Capital Committed, by Organization Profit-Status, 2009–2015



Note: Based on responses by 81 private organizations that reported making conservation commitments.

Respondents listed a lack of attractive risk/return deals, small transaction sizes, and management track records as limitations to conservation investment growth

Across all respondents, the majority listed their primary challenge to future growth as a lack of available deals with appropriate risk/return profiles—a constraint that was repeated when asking respondents about challenges to including more institutional investors in this space and one that was also most-cited in the 2014 report. Respondents also pointed to a number of secondary concerns to growth and expansion for institutional investors, including small transaction sizes and lack of management track records. Outside of traditional investment concerns, investors also expressed the need for more government support to absorb risks and to create enabling market conditions through pricing environmental externalities.

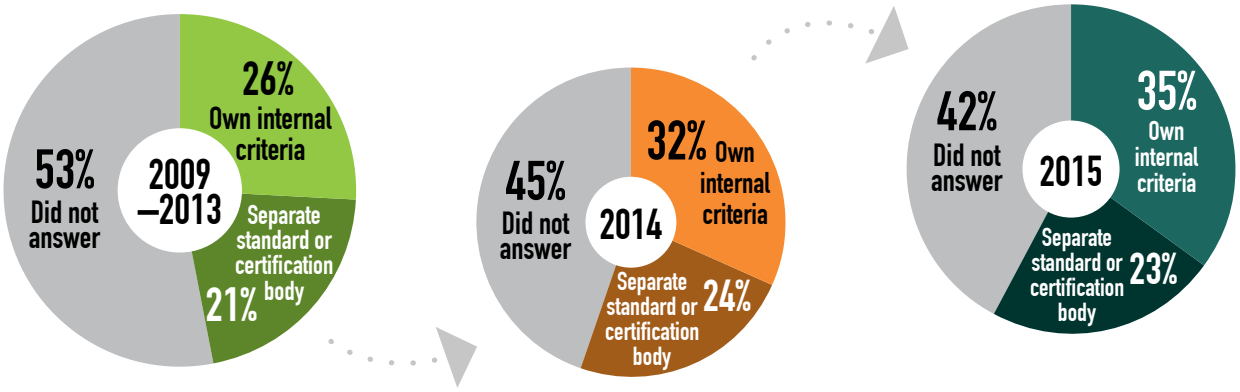
Private investors motivated by both conservation and financial return, but criteria for making investment choices varied slightly

When asked about their *motivation* for making conservation investments, private investor respondents ranked conservation objectives (30%) and financial return (27%) as near equals. In contrast, not-for-profits prioritized conservation objectives (48%) much more than financial return (8%), followed by other non-financial objectives (34%). However, with respect to actual deal-making, investors ranked the likelihood of meeting their financial return target (35%) and having desired conservation impacts (32%) as the top *criteria*.

More organizations monitored and/or reported on conservation impact in order to meet investor requirements or to voluntarily report on impacts

An increasing number of organizations monitored and/or reported on conservation impacts over the past few years. In 2015, respondents reported the highest use of monitoring and reporting, with 35% using internal criteria and 23% using a third-party certification or standard. Interestingly, a number of respondents indicated they developed or relied upon their own internal metrics for tracking conservation impacts, rather than utilizing an existing third-party criteria or certification.

Figure 7: Organizations that Monitor or Report on Conservation Impacts by Time Periods



Note: Based on responses by 45 private organizations that reported monitoring conservation impacts in 2009–2013; by 42 private organizations that reported monitoring conservation impacts in 2014; and by 50 private organizations that reported monitoring conservation impacts in 2009–2013.

Areas for Further Research

The findings of this survey brought to light five emerging themes that are worthy of further research on behalf of both private and public investors with an interest in investing in conservation:

Blended finance: A preponderance of mixed sources of investment capital and/or multiple revenue streams combined in an investment vehicle—often referred to as "blended finance" or "capital stacking"—was observed in innovative structures and generally with measurable conservation results in addition to competitive financial returns. The role of government financing or government policies (that, for example, enable favorable tax treatment or the maintenance of markets such as carbon finance) was significant in this area.

Public finance: While the authors tried to include public finance data in this report, only six public organizations responded. Of those, one development finance institution provided the overwhelming bulk of data; in essence, 94% of the reported public finance investment in this survey came from a single organization. Thus, there were likely far greater amounts of public finance being committed into conservation investments, and a more comprehensive analysis would benefit from a better understanding of both current investment practices and the role of public finance in spurring or enhancing private investment.

Supply chain commitments: Companies that utilize forest- and resource-damaging commodities such as soy, palm, cattle, and timber/pulp have increasingly made commitments to reducing or eliminating deforestation from their supply chains or have otherwise started to move toward more sustainable commodity sourcing. As part of their sustainability strategies, some of these companies are beginning to make their own internal investments in both their operations and their supply chain suppliers.

Conservation investments outside survey scope: In the course of developing the scope and the questions for the study, as well as the potential pool of targeted firms and organizations to survey, it became clear that a number of areas of current investment fell outside the defined scope of this study. Examples included investments in certain forms of agriculture with secondary benefits for forests or water, and investments in alternative cooking fuels or cleaner cook stoves that impact and benefit forests. This suggests that the potential scale of conservation-oriented private investment could be much larger than found in this study.

Investments moving into emerging economies: This report presents initial evidence that opportunities and experience from investments in developed economies in practices such as sustainable forestry or sustainable agriculture may finally be working their way into emerging economies, presenting new opportunities for investors in Latin America, Africa, and Southeast Asia. While this survey was successful in gathering responses from some organizations outside of North America and Europe, future studies should place an even stronger effort on outreach and engagement with investors in these other regions.

Introduction

Permanent protection of the planet's forests, biodiversity, water, and climate are simply unachievable without significant infusions of new financing—and in particular capital secured from the private sector. The conservation world is sharply focused on how and in what forms private investment can be secured at a scale at which it can have a meaningful impact on protecting ecosystems worldwide.

This report presents the findings of a major survey of the size, scope, and trends in private investment in conservation to better understand the scale and use of investments in conservation and to help guide the investment community on emerging trends and opportunities. It follows up on a 2014 survey and report *Investing in Conservation: A landscape assessment of an emerging market*.[3]

Private investment in conservation is still relatively new, but it is evolving out of a 50-year history of conservation finance encompassing such mechanisms as easements, tax incentives, public debt issues, debt-for-nature swaps and natural asset fee mechanisms, and, in more recent years, the growth and establishment of impact investing. While there is recent research on impact investments, particularly related to social issues, the field of conservation investments has not been well studied.

The intent of this study is to shine a light on the opportunities and experiences to date in private investment in conservation with the hope that the resulting knowledge helps to spur increased financing for the conservation of forests, water, and biodiversity.

Defining Conservation Investments

By design, both this study and the 2014 study kept the focus on specific areas of land and water conservation and, further, areas of investment with an intended financial return. Thus, the survey partners defined conservation investments as follows:

> *Investments intended to return principal or generate profit while also resulting in a positive impact on natural resources and ecosystems. In addition, conservation impacts must be an important motivation for making the investment; they cannot be simply a by-product of an investment made solely for financial return.*

The current survey as well as the original 2014 survey were focused strictly on the following three areas of conservation investing:

1. **Sustainable food and fiber production:** Includes enterprises in sustainable agriculture, sustainable farmland management, sustainable ranching, sustainable timber production, sustainable aquaculture, and wild fisheries (both marine and freshwater).
2. **Habitat conservation:** Includes species and habitat protection through direct land ownership or land easements; forest carbon investments; and mitigation banking designed to protect species, wetlands, and other ecosystems.
3. **Water quality and quantity conservation:** Includes watershed protection; water conservation and infrastructure improvement designed to balance human needs with ecosystems; stormwater management; and trading in water quality or quantity credits.

The survey did not take into account investments in renewable energy, energy efficiency, bioenergy, water or energy infrastructure, and pollution mitigation or control. These additional areas of investment have been amply covered by other organizations and tracking tools, and the intent of this report was a more targeted examination of actual private investments in land, water, and biodiversity.

[3] EKO Asset Management Partners and NatureVest, *Investing in Conservation.*

Key Findings, Emerging Themes, and Areas for Future Investigation

Key findings and themes that emerged from the data analysis are profiled in sections and case studies in this report, and also identified for research in a future survey. Throughout this report, case studies and call-out boxes are used to highlight these key findings and themes. Small graphic icons are used throughout the report to highlight these as follows:


Illustrations of key findings from the data


Emerging developments or opportunities to watch


Illustrations of the roles of government

Box 1: Global Pressures Mount for Sustained Private Investment in Conservation

The years 2015 and 2016 saw a number of events, as well as government and corporate actions that will significantly impact efforts to protect climate, forests, biodiversity, and water. These actions and events are sending mixed but strong signals to investors and have spurred some early responses that may indicate the emergence of new opportunities for private conservation investment.

The **Paris Climate Agreement** (December 2015) provides an umbrella framework for action around global forests, both as part of global climate mitigation targets and in country-level targets known as Nationally Determined Contributions. Under the Agreement, 162 Parties (with 28 European Union countries submitting as one block) submitted climate plans, and, as of December 2016, most of their climate reduction strategies include land-use goals around forestry or agriculture as a mitigation target (114) and/or non-emissions target (60).[4] However, achievement of these goals is contingent upon securing financing as agreed to under the Paris Agreement. For forests in developing countries, some estimates indicate that at least $20B per year is needed to reduce the deforestation rate by half.[5]

In establishing the new United Nations (UN) **Sustainable Development Goals (SDGs)**, the UN Conference on Trade and Development estimated that an additional $2.5 trillion per year is needed to achieve SDGs on top of existing commitments.[6] Most of the funding currently pledged does not go towards conservation investments. Of SDG aid tracked by AidData, development assistance towards Goal 15 (Life on Land) is the second-smallest of all goals at $428 million (M), greater only than Goal 14 (Life Below the Sea) at $198M.[7]

[4] Climate Focus. *Progress on the New York Declaration on Forests – Achieving Collective Forest Goals: Updates on Goals 1–10* (Climate Focus in cooperation with the NYDF Assessment Coalition with support from the Climate and Land Use Alliance and the Tropical Forest Alliance 2020, 2016), http://www.climatefocus.com/sites/default/files/2016-Updates-on-Goals-1-10-Report.pdf.

[5] Doug Boucher, Estimating the Cost and Potential of Reducing Emissions from Deforestation, Briefing Paper 1 Tropical Forests and Climate (Washington, DC: Union of Concerned Scientists, 2008), http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_energy/Briefing-1-REDD-costs.pdf.

[6] UN Conference on Trade and Development (UNCTAD), *Investing in Sustainable Development Goals: Part 1 - Action Plan for Private Investments in SDGs*, Special Edition for the Third International Conference on Financing for Development (Geneva, Switzerland: UNCTAD, 2015). http://unctad.org/en/PublicationsLibrary/osg2015d3_en.pdf.

[7] Financing the SDGs," AidData, accessed December 7, 2016, http://aiddata.org/sdg.

Box 1 (continued): Global Pressures Mount for Sustained Private Investment in Conservation

Forest Trends' Supply Change project tracks over 450 companies that have made more than 760 **commitments to low- or zero-deforestation in their supply chains for commodities** that affect forests (cattle, palm, soy, and timber/pulp).[8] These companies are now seeking to secure sustainable and zero-deforestation commodities to meet their ambitious goals. Companies are starting to put pressure on governments to create the policies and frameworks needed to source sustainable goods, and some companies are starting to make their own investments within their supply chains in order to meet their goals.

These three major sets of commitments around climate change, sustainable development, and deforestation-free commodities are combining in ways that may create significant new public and private investment opportunities. For example, as demand for sustainable products grows, a number of efforts are underway to create country-, state-, and jurisdictional-level programs for producing sustainable goods. For example, Forest Trends is leading an effort with other organizations and governments to develop innovative financing structures, such as a proposed $200M green bond for Mato Grosso, that are based on a combination of public and private finance. These suggested hybrid structures are intended to help facilitate the development of jurisdictional programs and incentivize a shift toward low- and zero-deforestation soy and cattle production.

All of these developments come at a time in which the world is also seeing tremendous political shifts such as the exit of the United Kingdom from the European Union and the rise of a more nationalistic, internally focused leadership in the United States and in some European countries. These developments introduce uncertainty about the role of these governments in climate, forest, and resource-related issues, and underscore the increasing need for market solutions and private sector investment in achieving resource allocation and conservation goals.

[8] Supply Change website, accessed November 2016, http://www.supply-change.org.

Methodology and Survey Design

This 2016 survey of private investment in conservation was designed in large part around the previous 2014 survey of investment in conservation. The new survey was structured around the three categories of conservation described above and used in the previous survey (sustainable food and fiber production, habitat conservation, and water quality and quantity conservation). For comparative purposes, this survey generally asked the same questions as the previous survey.

Forest Trends' researchers began the survey by compiling a list of more than 600 known or potential investors, investment funds, project developers, banks, and other financial entities engaged in these three focus areas of conservation investment. In order to pull together a broad and global cross section of conservation investment types as well as financial and investment entities, the researchers drew from

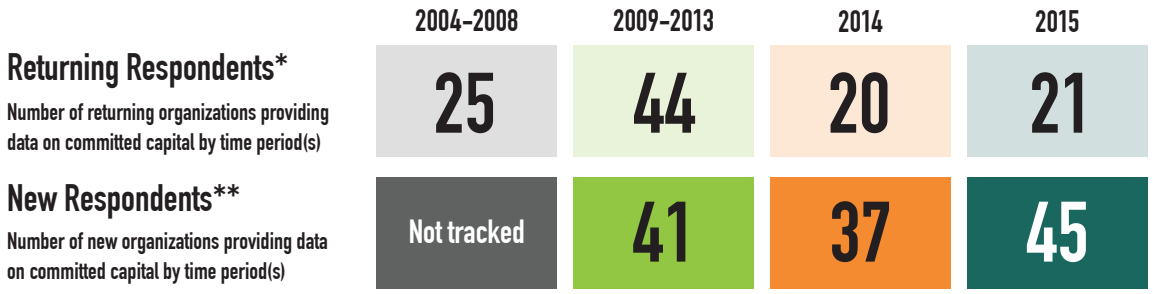
- all respondents from the 2014 survey;
- attendees from several conservation-oriented investment events;
- names drawn from case studies and survey participants in similar reports;
- companies and contacts pulled from Ecosystem Marketplace's internal contact databases of participants in the global carbon, water, and biodiversity markets;
- names provided by the Advisory Committee members; and
- names from relevant networks, including Toniic; Cleantech, Renewable Energy and Environmental Opportunities (CREO); Global Impact Investing Network (GIIN); the Agriculture, Forestry and Other Land Use (AFOLU) Working Group of the Climate Bonds Initiative; and others.

Changes from the 2014 Report

While many questions remained the same in both reports, the respondents to the two surveys varied greatly, as did the nature of their responses. The 2014 survey covered two 5-year periods: 2004–2008 and 2009–2013. The current survey included the period 2009–2013 and, in addition, the years 2014 and 2015. Respondents to the current survey were asked to provide historical data for the period from 2009 to 2013, and a number of returning respondents from the 2014 survey were encouraged to include and update their historical 2009–2013 responses. As a result, the current survey includes a much greater amount of data for the period 2009–2013 than reported in the 2014 survey, and thus the data for this period of years are not consistent in the two survey results.

The following figure shows the respondents from the earlier 2014 survey that were included in the current 2016 survey and also the new respondents to the 2016 survey, broken down by the time periods for which they provided data on actual capital committed.

Figure 8: Number of Returning and New Respondents Providing Data for Specific Time Periods



* Returning respondents were respondents who had participated in the 2014 survey. They were asked to provide new 2014 and 2015 data, but were also invited to update their 2009–2013 data, if they wished.

** New respondents to the 2016 survey were asked to provide historical data for the time period from 2009 to 2013 in addition to 2014 and 2015 data. They were not asked to provide older data for 2004–2008.

Note: Based on responses from 104 organizations that provided data about capital committed for any of the four time periods. Not all organizations provided data for each time period.

A major difference between the 2014 survey and the current survey was the addition of new questions in two important areas. First, a new section of questions was added to gather knowledge about the measurement and reporting of conservation impacts. Second, some questions were added to fill gaps identified in the 2014 report.

Double-Counting

Because researchers solicited responses across a wide range of investors and investment types, double-counting results was a concern. The risk of double-counting arose when an investor responded about an investment in a particular fund and the manager of that fund also responded with information about its project investments. This year's survey addressed double-counting by

- asking respondents to identify any funds or companies with which they might be affiliated or have a financial relationship and that might also respond to this survey;
- conducting desk research to identify any additional instances of double-counting; and
- prioritizing reported duplicate investments in favor of finance closest to the project- or company-level. The typical order of inclusion was thus: company (or project level) > fund > investor into fund. For example, if a company invested in multiple projects, that response would be included first. If a fund invested in that company, that amount would be deleted while any other monies invested by this fund would be kept (assuming additional money went to another company or fund that did not respond).

Using this methodology, researchers identified $181.3M of duplicate investments. A further $42.2M was deemed out of scope and removed (for more information about what was deemed out of scope, see Box 2). Finally, an additional $22.4M was removed from responses referring to 2016 which was outside of the time periods tracked in this report.

Desk Research

Desk research was conducted to identify new potential respondents and was used to collect some data from organizations that did not respond to the survey but whose investments were deemed in-scope. However, for many funds and companies, public data at this level of detail was not available.

Key Definitions: Public versus Private

In a shift from the 2014 report, this report separates responses from public and private organizations entirely. Responses from **public organizations** include: jurisdictional or sub-national governments, national governments, development finance institutions, bilateral and multilateral organizations, credit guarantee-providers such as the Overseas Private Investment Corporation, and funding facilities. Responses from **private organizations** include: all manner of **for-profit** enterprises (fund managers, corporations, etc.) in addition to **not-for-profit** organizations (non-governmental organizations, foundations, etc.).

The previous report distinguished public and private responses but typically presented the data side by side. In this report, public investment data is largely covered on pages 10–12; all other figures show private sector investment data only. Aside from this treatment of public sector investment, the report also discusses the role of public sector policies and funding in spurring private investment in case studies and call-out boxes throughout the report.

A full list of terms used in this report can be found in the Appendix on page 56.

Putting Conservation Investments into Context

This report focuses strictly on conservation investments seeking a financial return. Grants, philanthropy, spending towards corporate sustainability goals, and corporate or government funding of such practices as pollution control or site mitigation (as a result of a permit or government requirement) were not included.

This examination of the breadth of financing and investment in conservation-oriented activities yielded a number of gray areas of financing that presented challenges to the researchers and raised legitimate questions on what to include in the survey or not. For example, some companies surveyed sought a number of other environmental, social, and governance goals, and could not easily isolate their conservation-oriented investments from that mix.

Other investments were in areas that had some level of positive impact on forests, biodiversity, or water, but were in peripheral areas outside of these three categories. These included investments in agricultural chemicals or productivity that yielded a reduction in water use, or investments in clean cook stoves that reduced downstream impacts on forests.

Thus, data included in this report represents only a subset of investments into conservation. There are likely additional investments across an interesting and potentially broad array of areas just outside the scope of this survey.

Box 2: What's in, What's out?

This survey purposefully focused on financial investments with an intended and positive impact on conservation and the environment. However, even this definition did not always provide a clear boundary between what to include and what to omit, given the ambiguous nature of conservation and the types of investments sometimes reported. For example, replacing traditional stoves with clean cookstoves is generally recognized as benefitting forests—but the direct impact of these activities on forests can vary:

- Inyenyeri, a Rwandan company, sells clean fuel and stoves to both rural and urban customers. When their urban customers use the more fuel-efficient pellets over charcoal, they are indirectly helping reduce demand for trees. But trees from where? It would be difficult and onerous to track this.

- In contrast, Livelihoods, a social impact investment advisor, reported on their clean cookstoves investments in this year's survey that investments made through their Livelihoods Carbon Fund received part of their financial return through the sale of carbon offsets, so all of the fund's cookstoves investments that were explicitly quantified decreased fuelwood consumption from the use of clean cookstoves. All of their projects were also located in rural areas where the link between nearby forests and local fuelwood use was quite apparent.

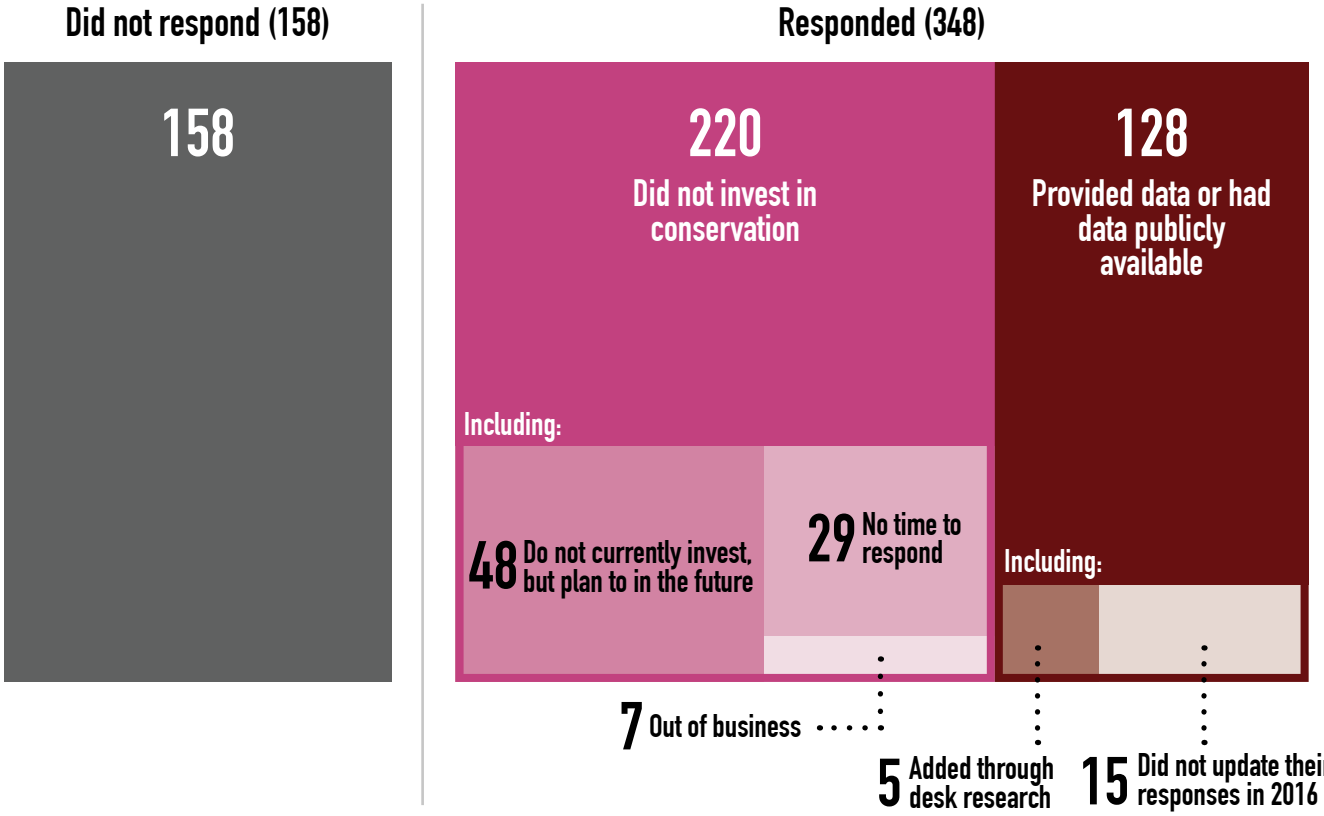
In general, investments were not counted in this survey when they were one step removed from the conservation impact. This could include an investment into a food manufacturer whose demand for organic or sustainable raw food might have indirectly spurred the creation of additional on-the-ground conservation benefits. Other cases included investments into a technology that sought to increase conservation.

Response Breakdown and Rate

After initial screening, 506 potentially relevant firms and organizations were contacted to participate in the survey (Figure 9). Of these targeted organizations, 184 respondents self-identified as ineligible either through email or in response to the first question of the survey, which directly asked if the entity was involved in a conservation investment activity that fit the survey definition and criteria. (Interestingly, of the 184 organizations that self-identified as out-of-scope, 48 indicated that they would invest in conservation in the future.)

An additional seven organizations were identified as having gone out of business, and a further 29 declined to respond to the survey, though they do invest in conservation. Their most commonly cited reasons for not participating were time constraints followed by confidentiality concerns. An additional 158 organizations did not respond to the survey at all, but researchers believed they were eligible based on information on their websites or other information about their investment activities.

Figure 9: Response Rate and Response Scope in 2016



Note: Based on outreach to 506 organizations believed to have invested in conservation-oriented outcomes.

All in all, 128 respondents to this survey (a 129% increase from the 2014 report) provided a rich base of data on both the financial as well as the conservation "returns" from an increasing amount of private capital finding its way directly into mainstream conservation practice. Of those respondents, a total of 104 respondents provided data on capital committed, of which 98 were from the private sector and six were from the public sector.

The respondents completed the survey to varying degrees: 66% responded in-full or nearly in-full, 14% responded only to the initial background questions, and responses for the remainder were added through desk research or through including respondents' 2014 responses. While many organizations responded to both the 2014 and 2016 surveys, a handful reported no new investments for 2014–2015 or did not respond to requests to update their response for the new survey.

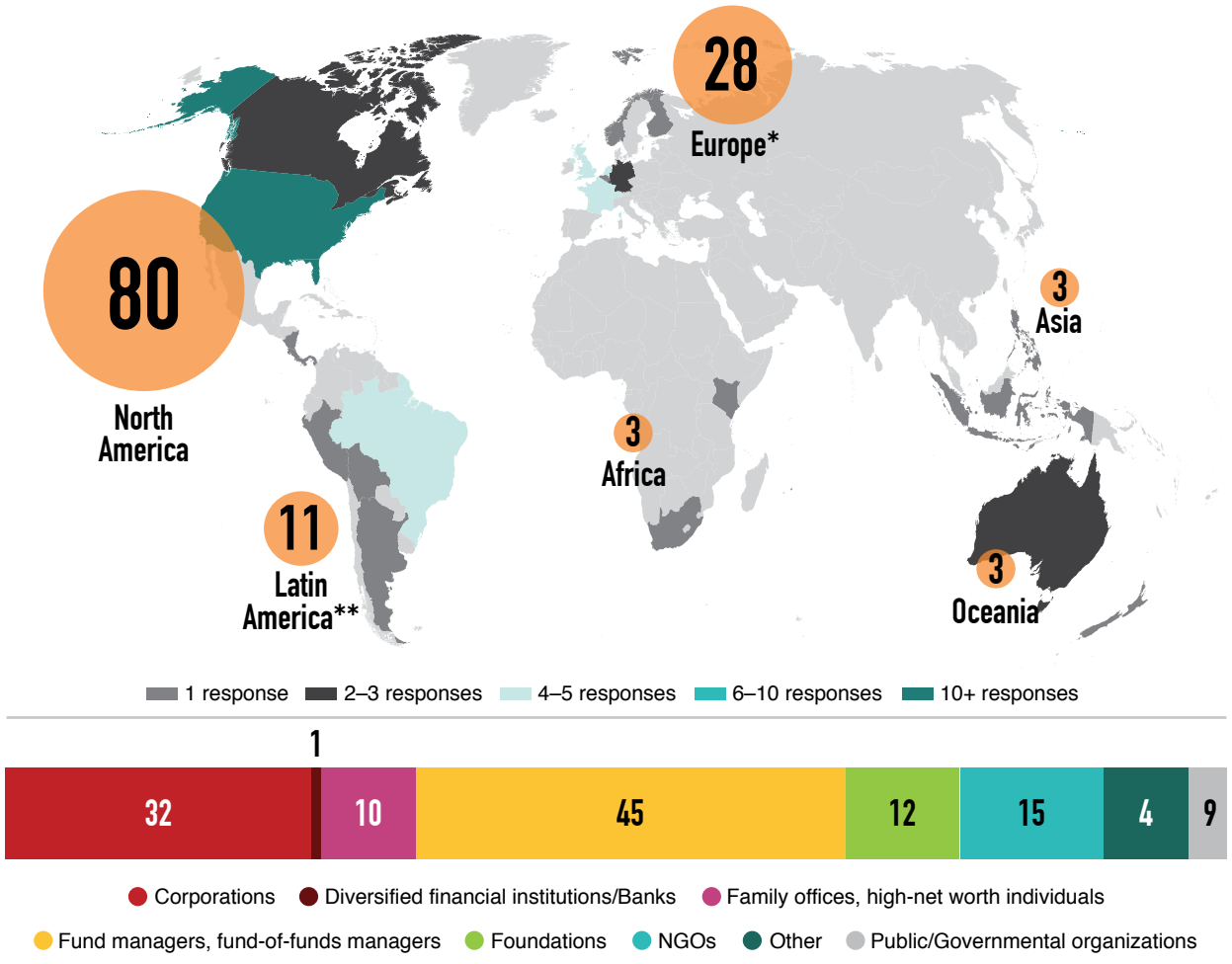
Respondent Location and Type

Organizations headquartered in North America comprised 63% of all respondents (Figure 10). The bulk of remaining respondents hailed from Europe. Fewer respondents were headquartered in Africa, Asia, and Latin America. Although primarily headquartered in North America or Europe, investors are investing broadly around the world. (see pages 20, 24, and 27 for details of investment location by region).

Fund managers comprised most of the respondents, followed by corporations (many representing companies that invest in projects or real estate). Not-for-profit organizations (foundations and non-governmental organizations, or NGOs) reported almost entirely from North America; only three were headquartered elsewhere. For-profit organizations made up the overwhelming majority of respondents from all other regions. Ten respondents were family offices and high-net worth individuals—up from 3 respondents in 2014.

While a handful of pension funds have made known investments into conservation funds or companies, none responded to this survey. The lack of large institutional investors represents, in part, the difficulty of contacting and soliciting a response from such organizations, but more likely the fact that these organizations do not yet consider this sector for investing, due to its relatively small size and newness. As some fund managers enter their third or fourth fund, they have begun to attract more institutional investment (see Case Study 2).

Figure 10: Response Rate by Region and Organization Type



* Includes Turkey and Russia
** Includes Mexico

Note: Based on responses by 128 organizations.

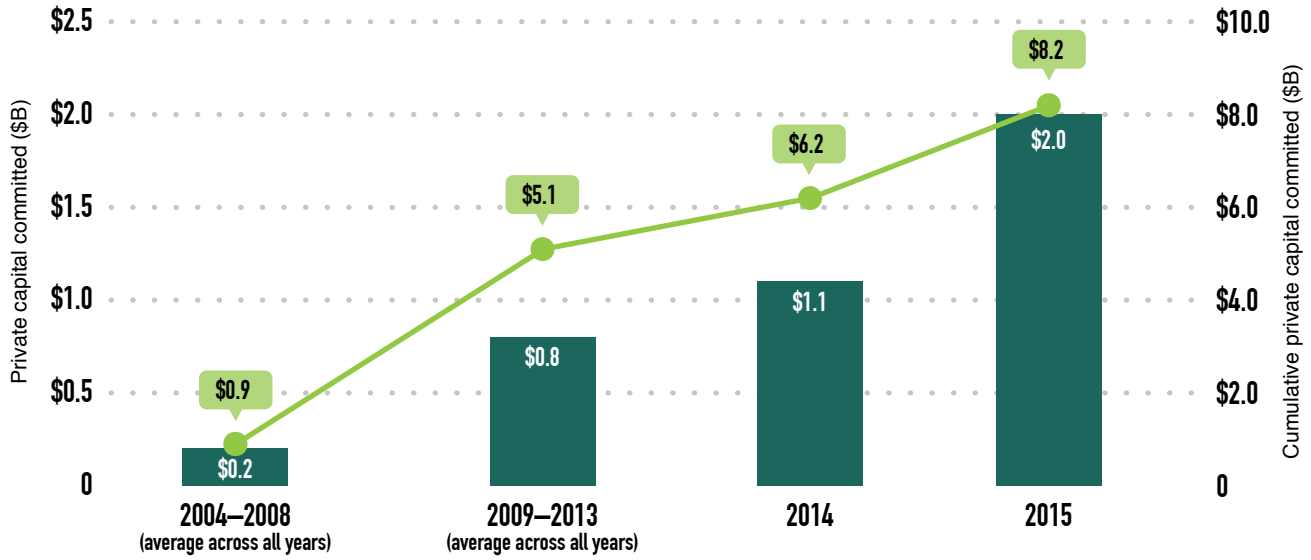
Private Capital Committed to Conservation Totaled $8.2B for 2004–2015

Private capital investment in conservation grew rapidly in the last two years, to a total of $8.2 billion (B)[9] committed between 2004 and 2015, up from $5.1B reported at the end of 2013 (Figure 11). (Note that the $5.1B cumulative total at the end of 2013 reported here is greater than the $2.8B reported for this period in the 2014 report. See Methodology Tip below.) Commitments in 2014 and 2015 accounted for 38% of total capital tracked to date. In 2015 alone, private organizations committed the most money ($2.0B) out of all years tracked.

There may be even more money available and poised for investment in the near future. Private organizations reported that they had $3.1B in uncommitted capital in reserve at the end of 2015. Furthermore, the majority planned to raise or allocate more money from 2016 to 2018 than they committed in 2013–2015. See page 49 for more detail.

While conservation-oriented investments have increased, more general social impact investments have also seen steady growth. The latest report by the Global Impact Investing Network, which collects annual commitments by impact investors, recorded $15.0B in capital committed to impact investments in 2015 alone in comparison to the $2.0B in capital committed to conservation in 2015 tracked in this report.[10]

Figure 11: Private Capital Committed across All Tracked Years, 2004–2015



Note: Based on responses by 98 private organizations that reported making conservation commitments.

Methodology Tip: Newly identified organizations responding to this year's survey could respond with data on commitments made each year from 2009 to 2015. Commitments reported for 2004–2008 are limited to those reported in the 2014 report. Furthermore, organizations reporting on 2009–2013 commitments were allowed to report on a per-year basis or on an aggregated basis. The latter matched the question format used in the 2014 report.

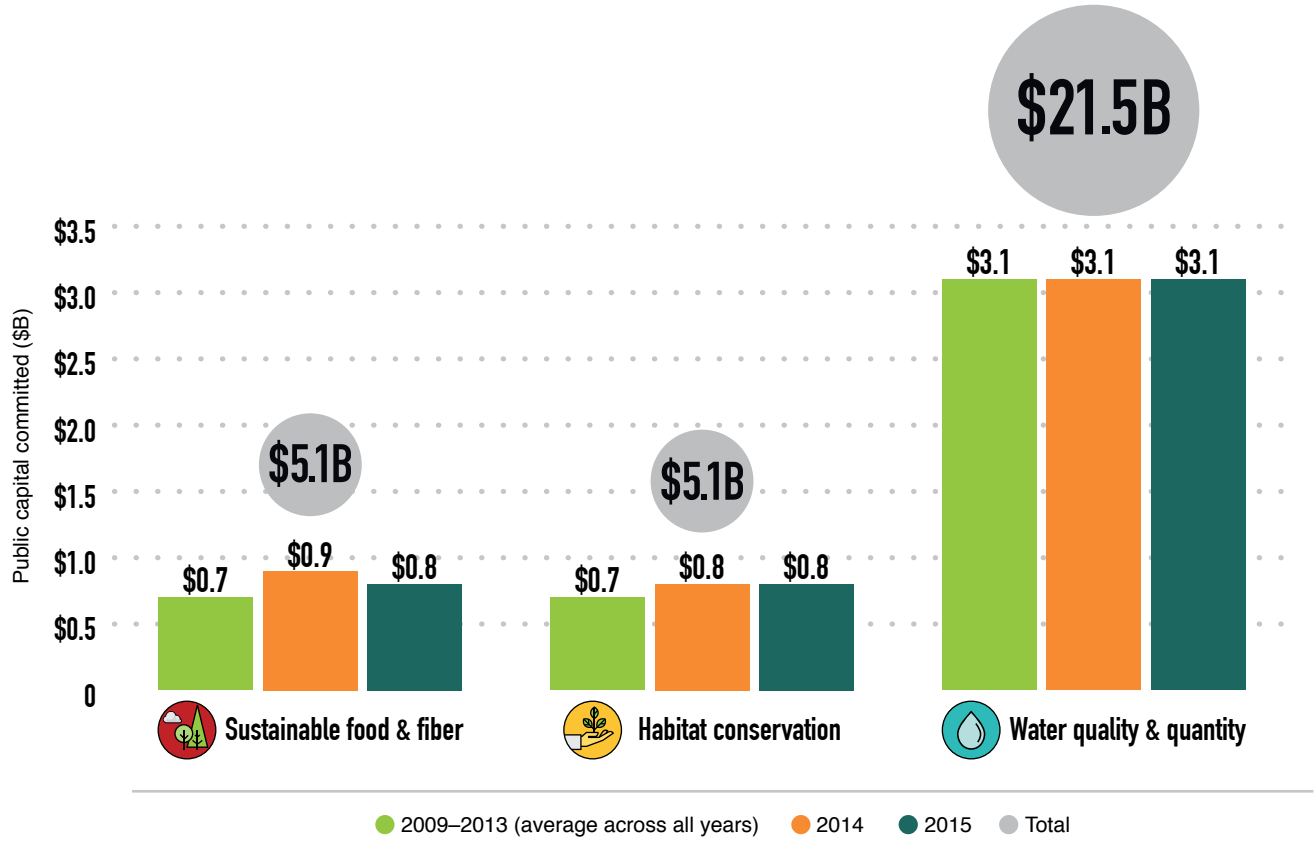
[9] In this report, all monetary values are reported in US dollars ($), unless otherwise noted.
[10] Abhilash Mudaliar, Hannah Schiff, and Rachel Bass, *Annual Impact Investor Survey* (New York: Global Impact Investing Network, 2016), https://thegiin.org/knowledge/publication/annualsurvey2016.

Public Sector Investment in Conservation Remained Large and Complex

Public sector investment in conservation remained at a much larger scale than private sector investment, with a reported $31.7B tracked across all years (2009–2015) (Figure 12), up from $21.5B reported for the 2009–2013 time period tracked in the 2014 conservation investment survey. In reality, public sector investment by development finance institutions and by other governments and public entities might have been much larger.

One single development finance institution respondent accounted for 94% of all public investment reported in this survey, and that organization's response was dominated by water quality and quantity commitments (mostly focused on sewage treatment and water infrastructure).

Figure 12: Public Capital Committed by Conservation Category, 2009–2015



Note: Based on responses by 6 public organizations. Numbers may not add up to the totals due to rounding.

Case Study 1: Upcoming Public Commitments to Conservation

If announcements made since the 2014 conservation investment report give any indication, interest in conservation investing seems to be rising, in particular among public entities that desire to use more of their conservation financing to enable or incentivize private investment:

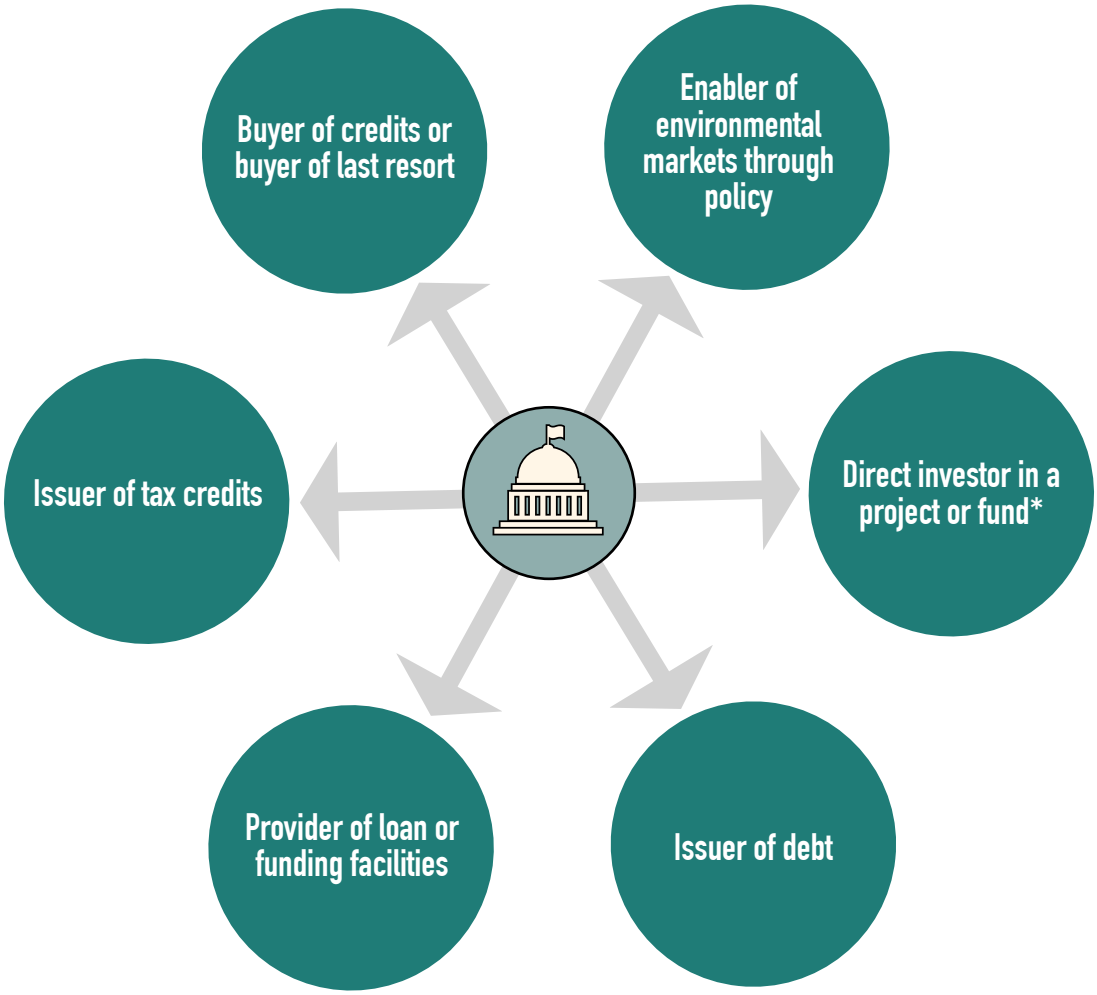
- The **Green Climate Fund** made its first commitments in 2015 to a first set of eight projects and in 2016 to a second set of projects. While most projects related to conservation have received grant money instead of loans, the Fund made its first equity investment of $35M into Althelia Ecosphere's Madagascar Sustainable Landscapes Fund in October 2016 to be, in turn, invested in climate-smart agriculture, conservation practices, and sustainable energy projects.[11]
- The **World Bank's Climate Investments Funds** completed their first two rounds of financing, mainly in the form of grants for forest carbon projects. However, one of these funds, the **Forest Investment Program,** began making loans in its second tranche and is currently evaluating how it can make actual investments or use its capital more creatively to spur and facilitate private investment through a potential third tranche of funding.
- The UN Convention to Combat Desertification has partnered with the private investment firm Mirova to develop a **Land Degradation Neutrality Fund** that hopes to achieve land degradation neutrality by 2030 through impact investments.
- The **Global Environment Facility** announced a number of new investments and funds planned to protect marine areas, encourage sustainable small-scale fisheries, and reduce ocean pollution. It is also evaluating how it can more creatively utilize its financing to directly invest in—or to incentivize private investment—in forests and climate-related projects.[11]
- The **United Kingdom's Development Finance Institution** launched a new 56 million pound (GBP) program—the Partnership for Forests—which aims to catalyze investment in sustainable forest and land-use projects through "public-private-people" partnerships.

On a parallel track, in early 2016 the World Bank announced a five-year Forest Action Plan, which highlighted the importance of investment in sustainable forest management and also of a more holistic accounting of forests across its work in other relevant sectors like agriculture, transportation, and energy. The plan represents an attempt to consolidate and streamline forest action across the World Bank's work internally and across the investments of the International Finance Corporation and the Multilateral Investment Guarantee Agency.

[11] "Madagascar Sustainable Landscapes Fund," Althelia Ecosphere, October 14, 2016, https://althelia.com/2016/10/14/press-release-madagascar-sustainable-landscapes-fund/.

Public direct investment is only one way governments can encourage conservation finance flows. In addition, tax incentives, market creation, loan facilities, and a host of other policies and programs can spur both direct and indirect investment (Figure 13). Some of these roles will be examined in further detail throughout this report in the form of case studies.

Figure 13: Mapping the Multiple Roles of Government Finance



* Typically a form of blended or stacked capital with for-profit investors.

Note: Based on six roles of government finance identified by the researchers.

Private Commitments in Food and Fiber Production and Habitat Conservation Increased Steadily over the Years, While Water Quality and Quantity Commitments Fluctuated

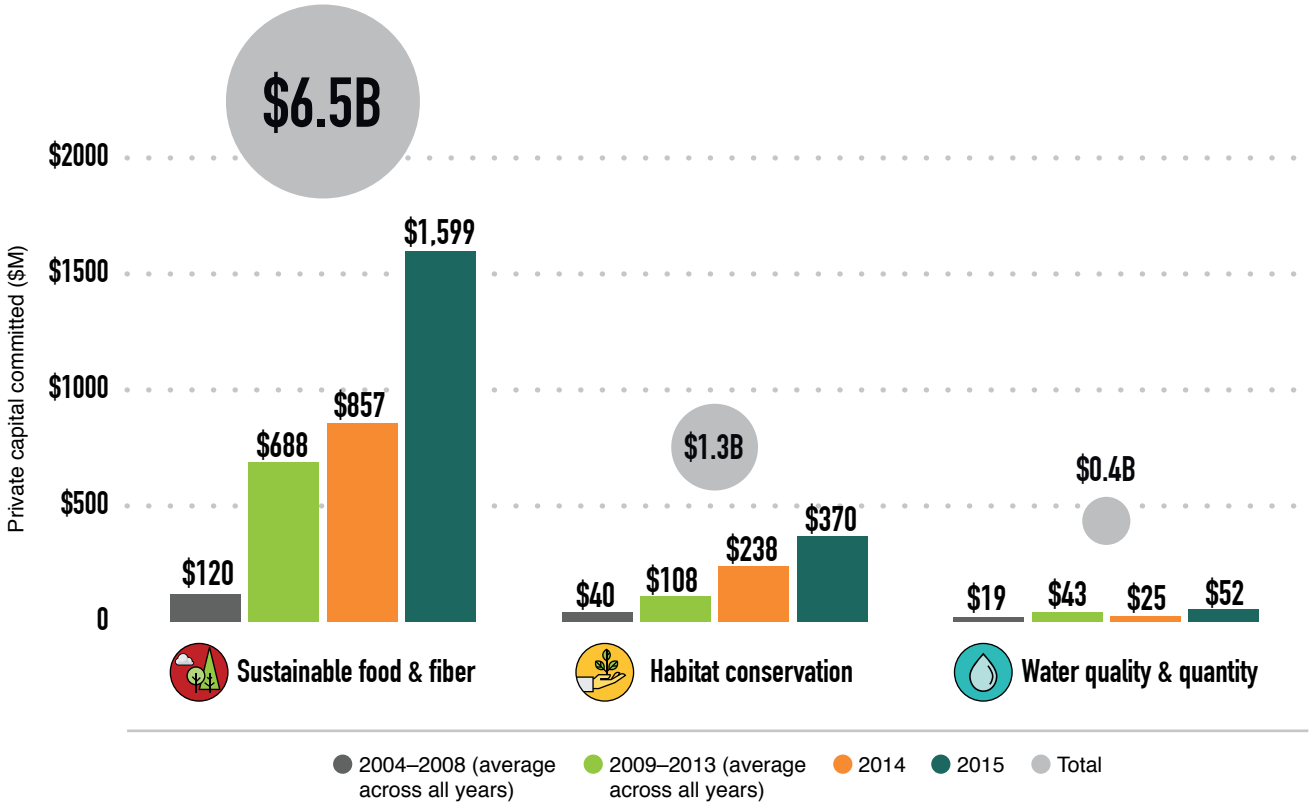
Among the three major types of conservation investments that this study focused on, investments in sustainable food and fiber production ($6.5B) were nearly four times as large as investments in habitat conservation ($1.3B) and water quality and quantity ($0.4B) together from 2004 to 2015 (Figure 14).

Commitments towards food and fiber production primarily went into sustainable forestry (55%) and agriculture (40%). Consequently, sustainable forestry and agriculture also are the largest investment sub-categories overall, representing 44% and 32% of the cumulative total of $8.2B committed to conservation. Breaking this out further reveals that only a few key respondents were responsible for the majority of increases in these fields (see page 17 for more detail).

Commitments towards habitat conservation also showed an overall increasing trend but with some variability across specific years. Direct land ownership, mitigation banking, and forest carbon investments comprised the majority, though there was no clear leader as in sustainable food and fiber production commitments.

Commitments towards water quality and quantity, however, did not follow the same pattern: only a handful of respondents reported financing this field, and the amounts varied over the years rather than trending up.

Figure 14: Private Capital Committed by Conservation Category, 2004–2015



Note: Based on responses by 98 private organizations that reported making conservation commitments.

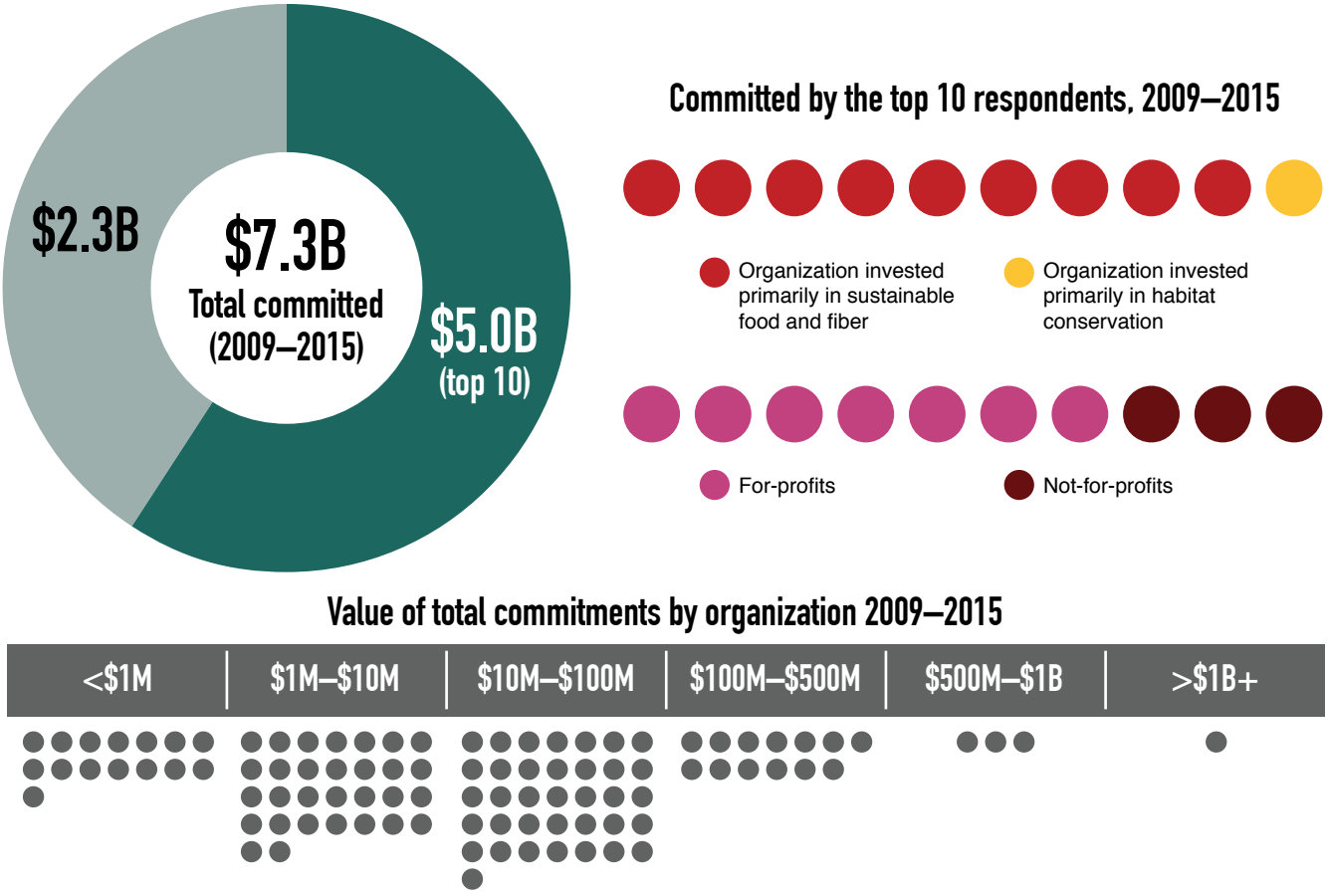
The Top Ten Private Investors Made 66% of Reported Commitments

The top ten investors in this survey made two thirds of all reported commitments (Figure 15). Nearly all of these organizations invested primarily in sustainable food and fiber production; only one out of the ten committed more to habitat conservation than to the other conservation categories.

A majority (6) of these top respondents were new respondents to the 2016 survey. These new respondents drove up the total capital committed: two years ago, only three organizations committed $100M or more between 2009 and 2013. That number rose to nine out of the top ten organizations committing $100M or more between 2009 and 2013 when including new respondents to this year's survey. In the current survey, including 2014 and 2015 commitments, the top five respondents each reported committing $400M or more.

The gap between the top ten organizations and other respondents has also widened over the years. The top ten organizations responding from 2009 to 2013 made up 68% of the total capital committed, which increased to 80% for 2014 and to 86% for 2015. It appears that organizations making the largest commitments grew by attracting new and more types of investment with the launch of new funds (see Case Study 2).

Figure 15: Profile of Respondents by Capital Committed, 2009–2015



Note: Based on responses by 98 organizations that reported making conservation commitments.

Methodology Tip: All instances of double-counting across respondents were removed from this report—except in this figure because it analyzes commitments made by organizations: so if one organization committed capital to another organization (which then committed that capital into a project or land), both amounts appear in this figure to give a sense of the organizational size.

Case Study 2: Institutional Investments Increasing; Biggest Funds Get Bigger

The report findings show an increasing trend of the top 10 organizations representing 86% of all capital committed in 2015, up from 68% of all capital committed in 2013. While nine organizations reported committing over $100M over a *five-year period* (2009–2013), three organizations reported raising and committing over $100M in 2014 alone, and five organizations reported the same in 2015.

So what drove this upward trend? Based on interviews with fund managers, one factor seems to be an uptick of institutional investors starting to make investments in the more established funds. **Althelia Ecosphere**, for example, reported raising capital from an insurance company as well as a pension fund based in the Netherlands. **Ecosystem Investment Partners**, now on its third fund, successfully raised capital from the New Mexico Teachers Retirement Fund.

Meanwhile, retirement fund **TIAA-CREF** took a more direct approach: after acquiring a majority stake in the timber investment organization **GreenWood Resources Inc.** in 2012, the two organizations announced the close of another global timber company, Global Timber Resources LLC, at $667M in 2015. Institutional investors in the company include TIAA-CREF, AP2, the Greater Manchester Pension Fund, and Caisse de dépôt et placement du Québec.

It is only natural that established investment funds were starting to attract more mainstream investment as they sought and closed their third, fourth, or fifth funds and as their project portfolios and internal rate of returns (IRRs) started to speak for themselves. Likewise, some of these investment funds, which heavily focused on more traditional and recognizable asset types such as forest management, were both larger-scale and more acceptable to mainstream institutional investors.

For these fortunate companies, the turnaround time for securing capital may also be getting shorter as well, and the sizes of the funds are growing. For example, Ecosystem Investment Partners' "Fund III," which closed in February of 2016 with $303M in equity capital commitments, took less than half the time to raise this capital compared to their $181M "Fund II," which closed in June of 2012. Similarly, **Lyme Timber**'s Fund IV closed at $75M above its target at $250M in late 2016—far more than its previous Fund III closing at $160M.

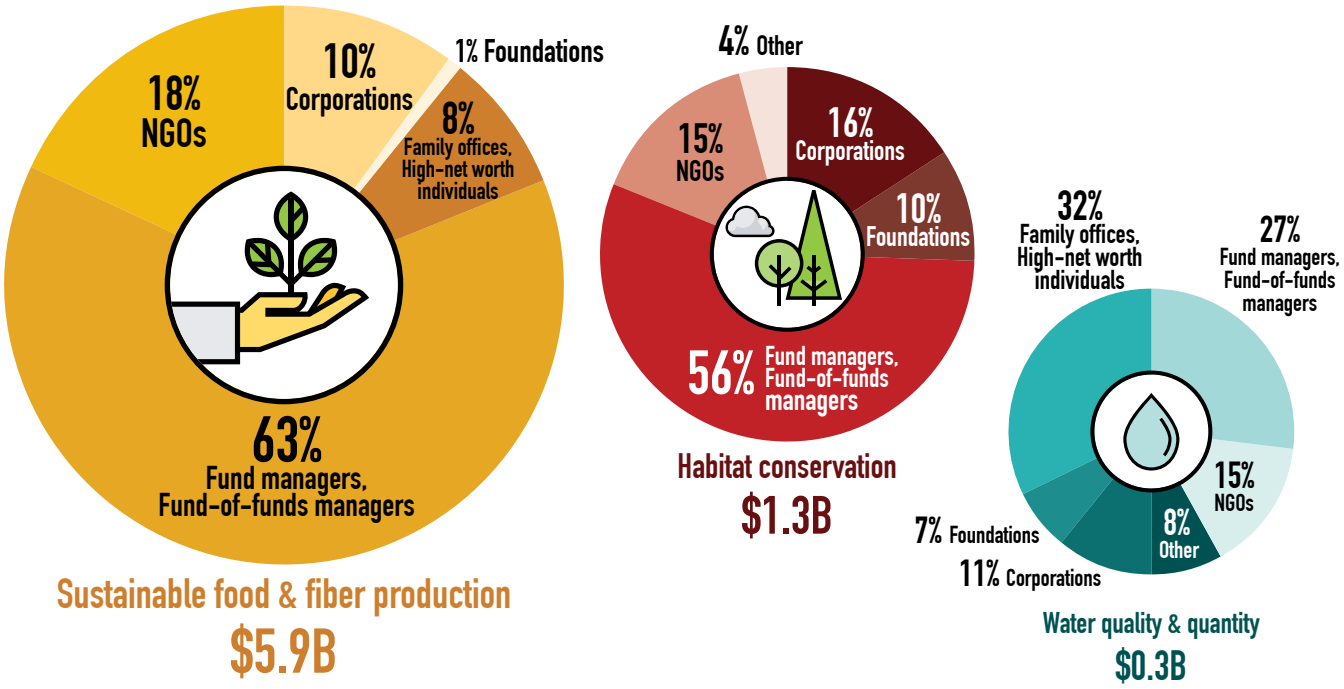
Fund Managers Most Active in Making Commitments

Fund managers reported the bulk of the finance, committing 60% of the total capital from 2009 to 2015. These organizations reported investing the majority of capital in both sustainable food and fiber production, as well as in habitat conservation.[12] Interestingly, family offices comprised 7% of total commitments, but reported making most commitments towards water quality and quantity outcomes.

NGOs committed 17% of overall capital, overwhelmingly in sustainable food and fiber production investments. Nearly all of these commitments went towards sustainable agriculture in Latin America or Africa. The investments of the other not-for-profit respondent type, foundations, only comprised 3% of total capital committed, which went mostly towards habitat-oriented investments. Most foundations invested through program-related investments, below-market investments made to support charitable activities within an organization's focus. New guidance by the US Internal Revenue Service in late 2015 may open the door for foundations to channel more of their mission-related investments (market-rate investments) into sectors related to their charitable scope like conservation.

Finally, corporations, which typically invest in land or projects, reported committing 11% of overall capital. Most commitments went towards sustainable food and fiber production; habitat conservation ranked second.

Figure 16: Total Capital Committed by Conservation Category and Investor Type, 2009–2015



Note: Based on responses by 98 organizations that reported making conservation commitments. Numbers may not add up to the totals due to rounding.

Methodology Tip: This includes double-counting, as the idea is to understand responses on an organizational basis. If a foundation and family office both reported commitments made to a fund and the fund manager also responded with information of commitments it made, all of those amounts appear above.

[12] Note that there are relatively few water funds in which fund managers can invest. However, direct investments in water are an option for other investor types such as family offices.

Sustainable Food and Fiber Production: Commitments Flowed Towards Sustainable Agriculture and Forestry

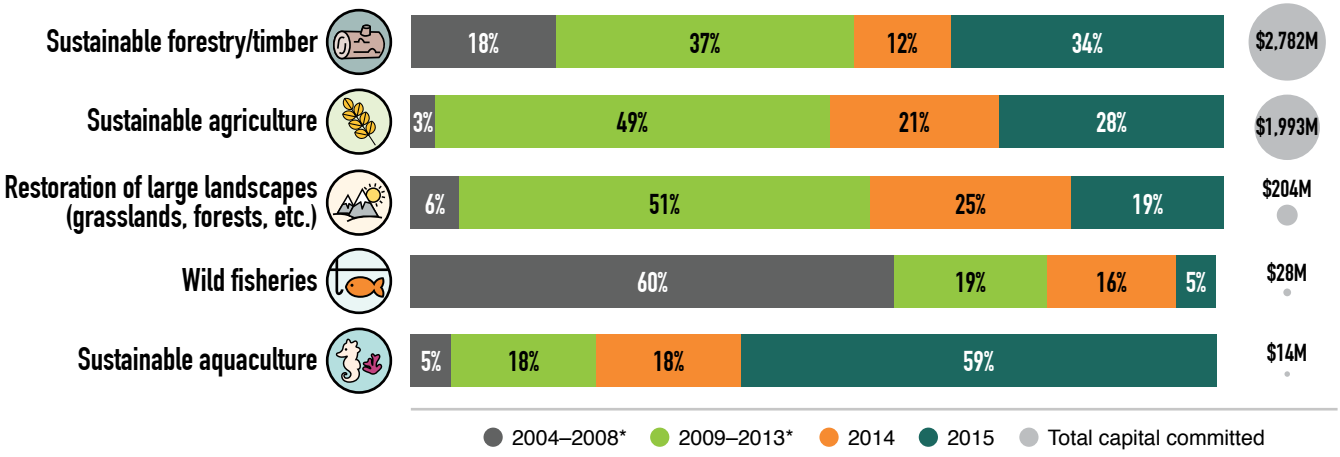
Private investors viewed agriculture and forestry as asset classes long before "sustainability" entered investors' vocabularies. Additionally, the scale often required when investing in real assets like forests means that a large part of what these fund managers do is buy land, which is a capital-intensive process. It is then little surprise that the majority of capital committed in this report went into sustainable forestry and agriculture.

Sustainable agriculture commitments totaled $2.0B, and sustainable forestry made up the bulk of all commitments, totaling $2.8B across all years, representing 55% and 40% of the total investment in sustainable food and fiber. (Figure 17). Nearly a third of that, $951M, was invested in 2015 alone, a significant scale-up from years prior. However, the majority of that stems from a single respondent who reported around two-thirds of the total capital committed in that year. Without that single respondent, the total capital committed across sustainable forestry and sustainable agriculture remained more or less equal across all years.

The scale and timing of forest asset investments could explain the dominance of this one investor in a given year. Timber funds often raise money in funds that typically last around 7 years; a large volume of money is raised in year 0 and invested in years 1–3. After that, the investments are typically managed and run down before the next fund is raised. The large amount of capital committed by a single respondent in 2015 may be explained by its place in this cycle.

The next-largest conservation category under sustainable food and fiber production, restoration of large landscapes, is an order of magnitude smaller and received only 4% of capital committed. Compared to habitat or water quality and quantity investments, however, it's more on par with the total capital committed. In many cases, organizations reported splitting the capital committed across this category and other sub-categories in habitat conservation such as watershed protection, land easements, or forest carbon investments. Few organizations reported on committing capital to either sustainable fisheries or aquaculture, though there is evidence of growing interest from new funds launched in 2016 (see Box 3).

Figure 17: Private Capital Committed in Sustainable Food and Fiber Production Sub-categories, 2004–2015



* These percentages are of the total capital committed from 2004 to 2008 and from 2009 to 2014. It is not the percentage of the average capital committed per year within those time periods.

Note: Based on responses by 73 organizations that reported making sustainable food and fiber production commitments. Numbers may not add up to the totals due to rounding.

Methodology Tip: Respondents to this survey were asked to report on capital committed by intended conservation outcome. However, in many cases, organizations aimed to influence multiple outcomes. In these cases, respondents chose the primary outcome or split the capital committed across different outcomes.

Case Study 3: Blended Public/Private Investments Bring New Finance to Forests and Agriculture

Securing financing to cover an investment's up-front costs is critical—at least, until the investments are tested and scaled, and the concept generates a consistent return. To address this, a number of successful conservation investments have been designed with blended or stacked capital, combining grants from government programs or funders with tax incentives and other mechanisms in order to attract and secure private investment. In so doing, these creative, and at times elaborate, investments blend lower-cost public and philanthropic capital that is seeking measurable public benefits with private capital that is seeking a return on investment.

The research associated with this report turned up a number of examples of these blended or stacked capital investments, in particular in the sustainable food and fiber production area. One example is **Ecotrust Forest Management**, a US-based forest investment manager that produces sustainable (Forest Stewardship Council-, or FSC-, certified) forest products with multiple conservation benefits. Ecotrust's investment strategy is to monetize a number of public values supported by working forests, including clean water and open space, through conservation easements, climate change mitigation via carbon credit sales, habitat protection via public restoration funds, and job creation in addition to production of timber and non-timber forest products.

Specifically, through its Evergreen Fund and through a new 10-Year Fund, the company has accessed more than $18M via the New Market Tax Credit program; developed and sold carbon credits worth $500,000; sold land and easements; harvested more than 10M board feet of timber; and increased standing timber, which adds to strong capital appreciation. The capital structure of the new fund blends private investor equity, philanthropic (foundation) debt capital, and New Market tax equity capital for acquisitions, and blends sale of commodities, ecosystem services such as carbon, as well as restoration and mitigation funding to support property management and income generation.

Since launching, Ecotrust has exited three properties to permanent, conservation-oriented owners including the Coquille Tribe for ancestral land repatriation, the Siletz tribe for coho habitat, and the state of Washington, Department of Natural Resources, for timber production and land conservation.

Another forest investment example involving a mix of public and private financing including tax credits was recently carried out by **Lyme Timber** and the **Conservation Fund.** In a project aimed at protecting 18,616 hectares of coastal forests that buffer the Lower Suwannee National Wildlife Refuge in Florida, Lyme acquired the property, using debt financing and private capital, in part from self-identified impact investors. The property was later refinanced with low-interest rate debt made available through the federal New Markets Tax Credit program. The state of Florida acquired an easement on 3,293 hectares of the property, and the long-term protection will be carried out largely with public and philanthropic funding.

An example of an innovative agricultural investment that started with a mix of public and private finance is **Climate Trust Capital**'s Fund I. Climate Trust Capital utilized a $1M Conservation Innovation Grant from the Natural Resources Conservation Service of the US Department of Agriculture to structure a pilot fund which then attracted a program-related investment loan from the Packard Foundation and a credit enhancement from The Climate Trust. Climate Trust Capital's Fund I intends to produce a return on investment through the sale of carbon offsets generated by projects that promote sustainable forestry and agricultural practices in forestry, grassland conservation, and livestock digesters.

Box 3: Sustainable Aquaculture and Fisheries Are an Emerging Development to Watch

Organizations reported committing only $42M to sustainable aquaculture or fisheries from 2004 to 2015, making those the two smallest sub-categories tracked under sustainable food and fiber production investments.

However, there are a growing number of funds and fund accelerators that have turned to focus on these sub-categories in recent years. **Fish 2.0**, an acceleration platform and competition devised to connect sustainable aquaculture and fishery companies with investors, first launched in 2013 and held again in 2015, has attracted more than 330 company entries. Interest in aquaculture also received a boost when the investment fund **Aqua-Spark** in 2014 launched an evergreen fund that targets long-term investments in the aquaculture industry. Aqua-Spark partnered with **WorldFish Incubator** in 2015, another accelerator designed to support investment towards sustainable small- and medium-sized aquaculture enterprises in developing countries.

Upcoming Funds:

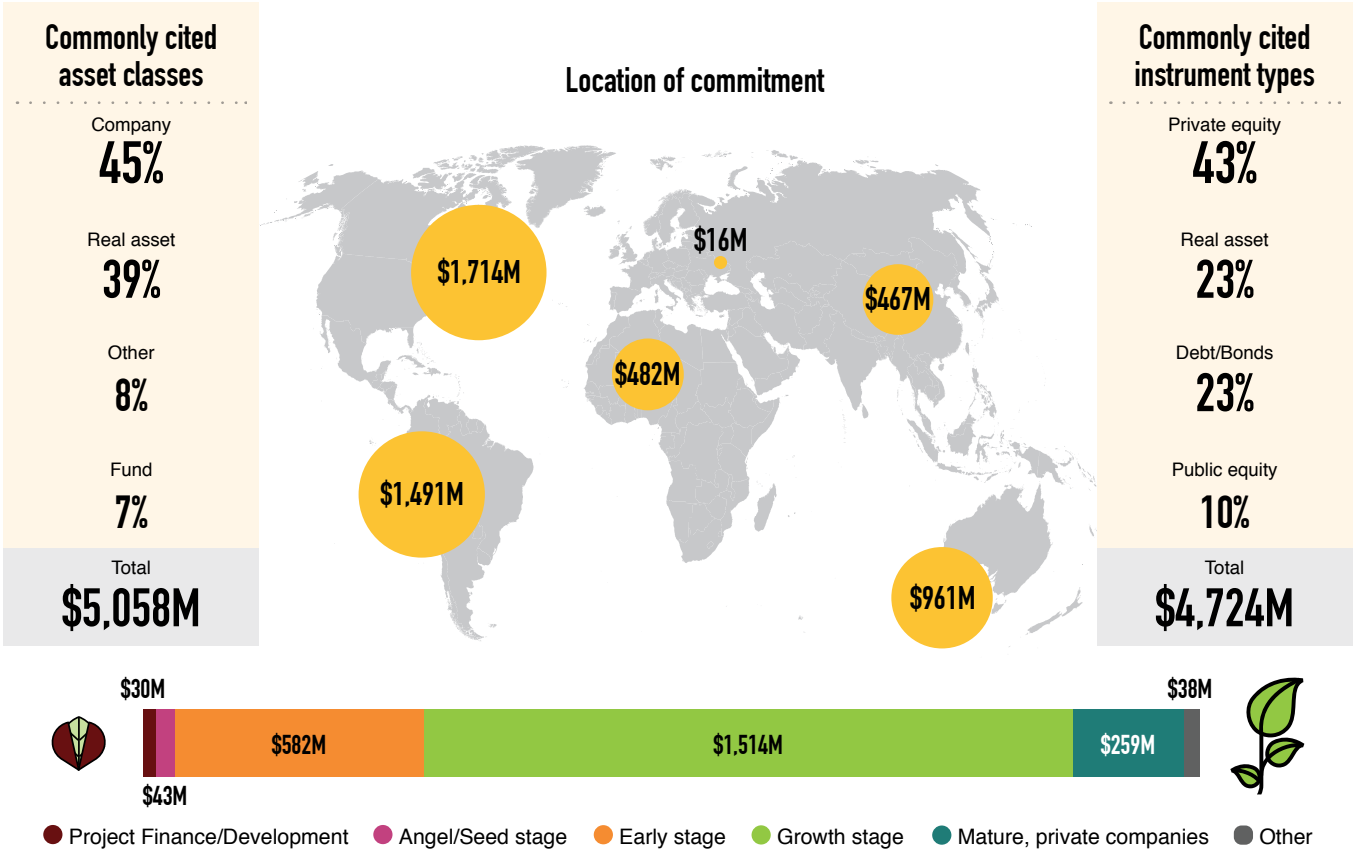
- **Althelia Ecosphere** announced the creation of its **Sustainable Ocean Fund**, which is seeking a first close at $50M during early 2017 to invest in sustainable fisheries, aquaculture, and other coastal projects in Latin America, Africa, and Asia. The fund has closed a new risk-sharing guarantee for private investors through the Development Credit Authority of the US Agency for International Development and has already attracted capital from major public investors.
- The **Meloy Fund for Sustainable Small-Scale Fisheries**, announced in September 2016, will invest in fisheries in Indonesia and the Philippines. This public-private partnership has already attracted capital and grants from the conservation organizations RARE and Conservation International, the Grantham Foundation, Encourage Capital, undisclosed foundations, impact funds, and family offices/high-net worth individuals.
- **Encourage Capital** is launching an investment platform in sustainable seafood companies in Latin America together with a US-based family office.

Sustainable Food and Fiber Production Commitments Were Geographically Diverse, Steeped in Real Assets

North America continued to attract the most capital committed within the sustainable food and fiber production category: across all years—excluding one outlier from 2015—the majority of capital went to North America (33%) (Figure 18). Latin America (29%) and Oceania (19%) followed not far behind. The remainder (18%) was split evenly between Africa and Asia.

Within sustainable food and fiber production, most respondents committed capital in sustainable forestry or agriculture, and in either real assets (39%) or in companies (45%), typically in their growth stage. Though not quantified, it is likely that respondents with sustainable forestry or agriculture management expertise invested in real assets, while more generalist investors were more heavily invested in companies.

Figure 18: Private Capital Committed to Sustainable Food and Fiber Production by Geography, Asset Class, Instrument Type, and Finance Stage



Note: Based on responses by 73 organizations that reported making sustainable food and fiber production commitments.

Methodology Tip: Respondents did not always respond equally to these attribute questions. They often responded to questions that aligned most closely with how their organizations internally tracked investments. If a question required additional analysis, some respondents took the time to fill it out while others did not. Thus, the totals may vary between different questions.

Case Study 4: Private Investment Moving into Emerging Economies

Based on findings in this survey, over one-third (37%) of committed capital went to Latin America in 2014 and 2015, and a significant amount of this money was used for forest management. This finding was dominated by one particular large company investment, so it is not clear that sustainable forestry investment in Latin America is a long-term trend. However, the findings do show some evidence that more investment capital is beginning to move toward financing projects in Latin American, Africa, and other regions of emerging economies.

One such example is **Symbiosis Investimentos**, an investor-driven forest products company with the specific business model of reforesting previously degraded (mostly cattle) lands with a mix of native but largely eradicated forest species. Company founder Bruno Mariani supported 25% of the original company capitalization with his own funds and found seven additional investors to go into business with him based upon an independently audited business model that conservatively projects a 12% annual IRR from timber harvests.

To date, Symbiosis has reforested 1,500 hectares of degraded land with around 30 native forest species, in mixed plantings (not plantation), using a selective harvest model for targeted species. The first harvest is to take place in 2017 and will include species that are commercially viable but that have largely been over-cut and not available in recent years (so, demand and thus prices for these species are reasonably high). Looking ahead, Symbiosis has launched a second round of raising private capital for a 20,000-hectare reforestation project, mainly targeting the Atlantic Rain Forest; the company has a 10-year goal of reaching 100,000 replanted hectares of both Atlantic and Amazon rain forests.

There is similar investment activity in Africa, although not at the same level as in Latin America. An example from the survey is the **Global Environment Fund**, a private investment fund that principally invests in forest assets and forest management and that has successfully raised private capital for its Africa Forest Investment Fund. The Africa Fund invests in timber lands that have the potential to benefit from long-term, sustainable forest management and that can provide benefits to local communities as well.

As a traditional timber investment fund, the Africa Fund's investments have been largely in FSC-certified forest products targeted to building product markets in Africa. They are currently developing two new projects in Gabon (100,000 and 560,000 hectares) involving selective harvest of desirable species, with the larger Gabon project involving management of native forest. The company states that these and future projects place an emphasis on replanting of degraded lands, mainly with plantation forests, and on attempting to build local markets for plywood, other forest products, sustainably produced charcoal, and biomass energy, all in Africa.

Habitat Conservation: Traditional Land Acquisition Reigned, Followed by Commitment to Environmental Credits

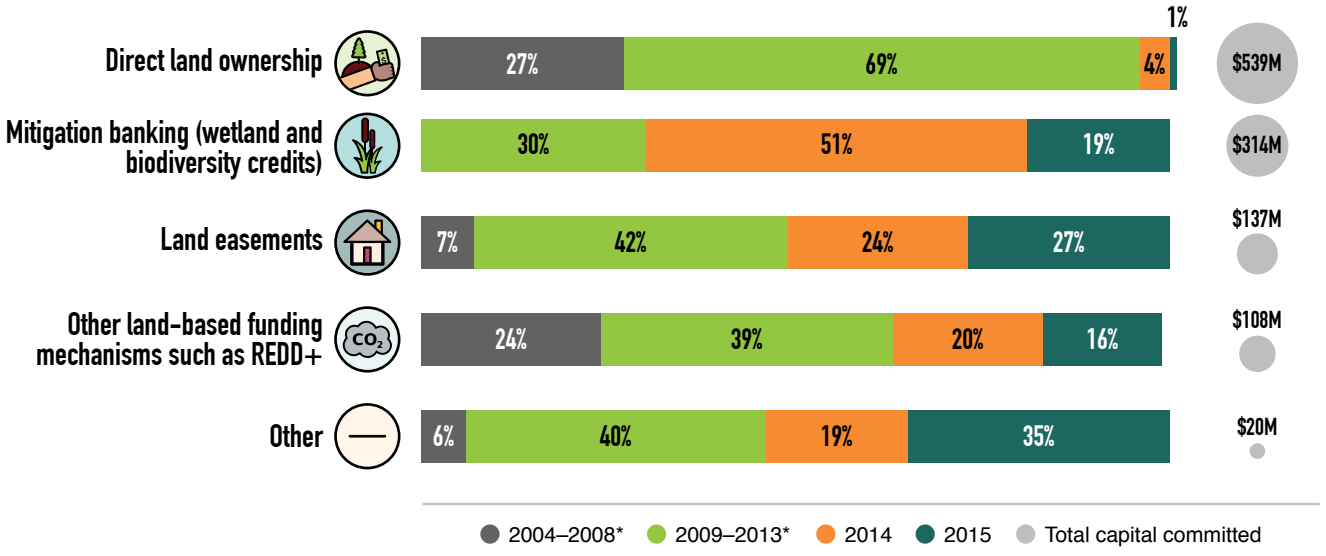
Habitat conservation investments recorded in this survey typically fell into two categories: investments in the purchase of land, or investments in the purchase of tradable environmental assets such as carbon offsets or mitigation banking credits.

The majority of capital committed to habitat conservation (48%) went towards direct land ownership, probably the most widely understood method of conserving habitat (Figure 19). Respondents directed another 12% of committed capital towards land easements, which also rely on land ownership and are a popular tool for conservation in the United States due to the tax incentives they receive. Investments in land easements were only included in this report if they were part of an investment strategy (as easements alone only unlock tax benefits). Investors in both categories reported investments almost exclusively located within the United States, and they typically favored real asset acquisition or (less so) investing in companies.

Mitigation banking and other land-based funding mechanisms (referred to as forest carbon in this text) are not based on land, but on the ecosystem services the land provides. Perhaps unsurprisingly, most of the respondents making such commitments reported investing in environmental credit assets or in not-for-profit organizations.

Forest carbon commitments comprised the bulk of non-US commitments, with 44% directed towards Latin America, 21% towards Africa, and 8% towards Asia. Those reporting on US-based investments included projects geared at both the voluntary carbon markets and at the California compliance market.

Figure 19: Private Capital Committed in Habitat Conservation Sub-categories, 2004–2015



* These percentages are of the total capital committed from 2004 to 2008 and from 2009 to 2014. It is not the percentage of the average capital committed per year within those time periods.

Note: Based on responses by 56 organizations that reported making habitat conservation commitments. Numbers may not add up to the totals due to rounding.

Methodology Tip: Respondents to this survey were asked to report on capital committed by intended conservation outcome. However, in many cases, organizations aimed to influence multiple outcomes. In these cases, respondents chose the primary outcome or split the capital committed across different outcomes.

Box 4: Mitigation Banking Emerging Developments to Watch

Mitigation banking rose out of US regulations (especially the Clean Water Act) that prohibited "net" wetland loss. The regulations require that every developer building a highway or other construction project on top of wetlands has to compensate for any possible damage by restoring, enhancing, creating, or preserving wetlands or streams elsewhere.

Mitigation banking has taken off in the last decade thanks to a 2008 law that favors a focus on larger landscape-scale offsets over on-site restoration. Reported mitigation banking commitments accounted for $314M across all years, although the total is likely much higher in reality. Currently, all commitments remain in the United States, thanks to these domestic laws.

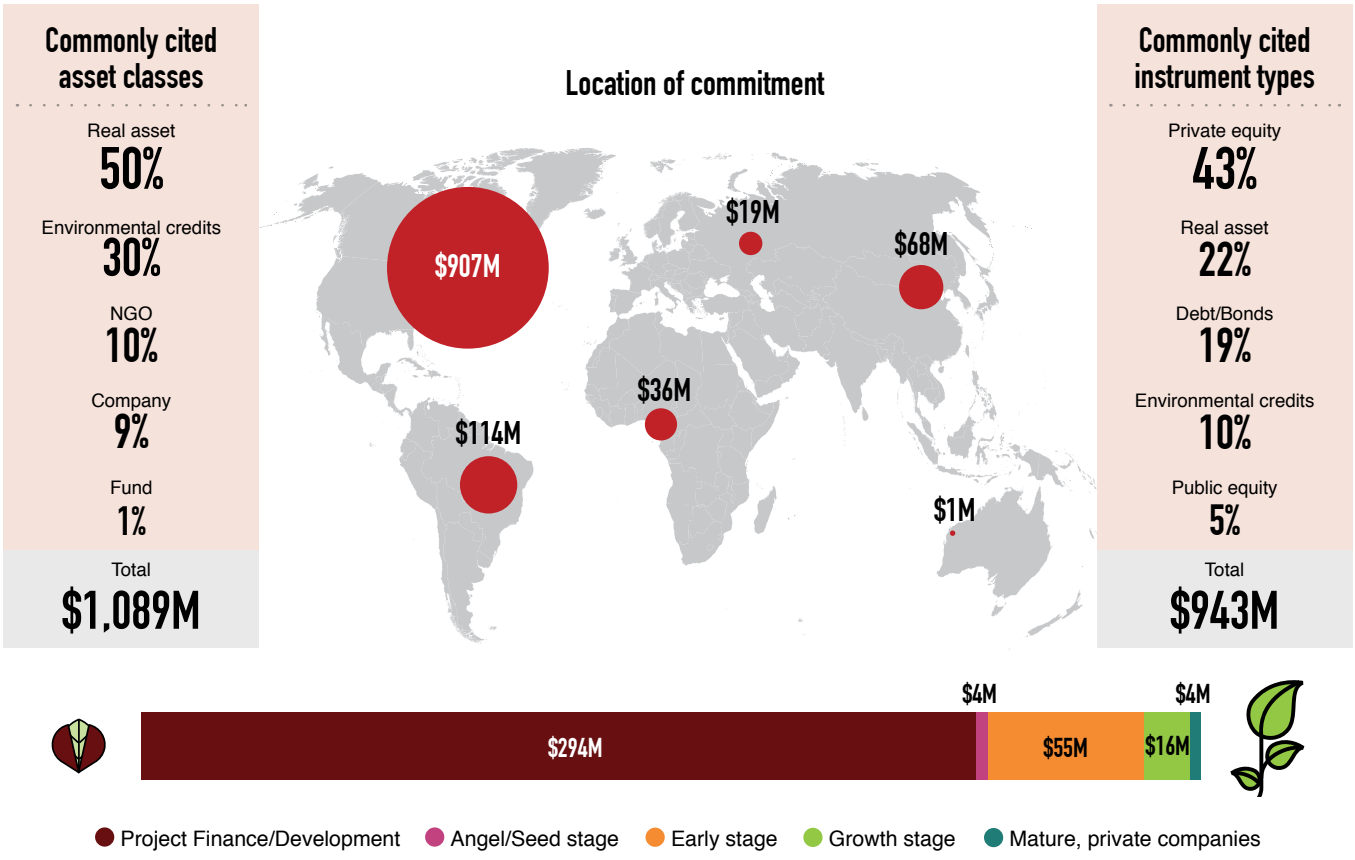
These investments could catch on in a big way, according to promises made by private sector participants at the White House Conservation Roundtable in the spring of 2016. The roundtable saw public and private sector participants announce $2B in investments towards conservation over the next few years. Over half of these commitments came from private organizations intending to expand their wetland, stream, or habitat mitigation programs. One of the participants, the National Mitigation Banking Association, claimed its members had already invested nearly $5B in restoration and conservation, though this survey did not track that much as historically committed.

Habitat Conservation Remained Primarily Based on Land Acquisition in the United States

The majority of habitat conservation commitments fell into the same pattern as those for sustainable food and fiber production: typically, organizations made commitments in North America through purchasing real assets. This makes sense for land easements, which have historically been unique to the United States. Direct land ownership likewise remained rooted in real asset acquisition in the United States.

Mitigation banking commitments broke the mold slightly. While most mitigation banking capital committed (92%) remained in North America as well, respondents favored investments in environmental credits instead of real assets (Figure 20). Forest carbon commitments also shifted focus towards environmental credits, and, in this case, most respondents (74%) committed capital outside of North America.

Figure 20: Private Capital Committed to Habitat Conservation by Geography, Asset Class, Instrument Type, and Finance Stage



Note: Based on responses by 56 organizations that reported making habitat conservation commitments.

Methodology Tip: Respondents did not always respond equally to these attribute questions. They often responded to questions that aligned most closely with how their organizations internally tracked investments. If a question required additional analysis, some respondents took the time to fill it out, while others did not. Thus, the total number of responses may vary among the different attributes analyzed here.

Case Study 5: Government Policy Critical to Environmental Markets

It is not a secret that the role of government is essential in making—or in some cases—breaking conservation markets. The backbone of US-based habitat credit banking—wetlands, stream bank, and riparian forest buffer banking under Section 404 of the Clean Water Act—is supported by a consistent set of rules and backed by the certainty of legally enforced protection of wetlands (including a federal No Net Loss policy). Under this regulatory environment, the number of habitat credit banks has grown to over 1,500 nationwide.

Similar regulation-driven habitat banking programs are active or in development in Australia, Canada, and Germany, and are also being piloted in Colombia, France, the Netherlands, Spain, and the United Kingdom.

However, in another area of water-related banking, the role of government has had mixed results. Nutrient trading efforts in a number of states in the United States have had a slow start, or have faltered, due to government inability to create clear rules or enable a broad enough set of opportunities for credit creators or credit buyers to enable a working market. Current efforts, for example, in the Chesapeake Bay states of Maryland, Pennsylvania, and Virginia, have resulted in three different systems with varying degrees of success.

In contrast—and in the same region—the Department of Energy and Environment in Washington, DC applies strict stormwater management requirements to every development permit in DC and recently opened up the doors to stormwater retention credit trading. The consistency of applying the permit-driven stormwater requirements that compel on-site or off-site mitigation and an in-lieu fee option that helps stabilize prices have enabled the birth of a new stormwater credit market. Although the program has just recently launched, Encourage Capital, The Nature Conservancy, and other investors are beginning to make investments in credit projects to provide offsets for this new stormwater retention trading system and are also starting to make a return on their investments.

Developments in the United States in the last two years have signaled to bankers and investors hope of new rule changes and policy developments that would enable as many as three new credit markets: water quality; endangered species; and natural resources damages (the latter through the U.S. Environmental Protection Agency's (USEPA) Superfund).

All three opportunities are based on stronger and more consistent rulemaking, based in part on an emerging interest of the U.S. Department of Interior in compensatory approaches, including mitigation banking, to help projects develop equivalency of standards and to make the processing of applications for new wetlands and species banking more efficient.

Although the recent election may put the brakes on some federal-level actions in the immediate future, there has been related progress at the state and local level. For example, under the USEPA's National Resources Damage Assessment, three cities—Seattle, Portland, and Baton Rouge—have all enacted coastal protection policies.

Water Quality and Quantity: No Clear Trends as Private Investors Tried Out Varying Financing Mechanisms

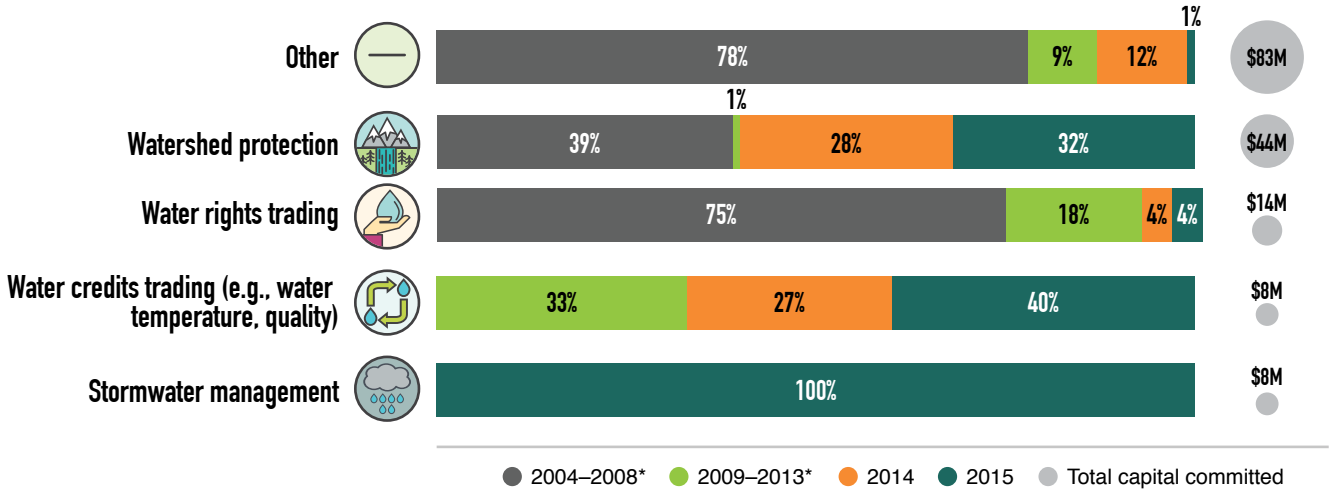
Investors in water quality and quantity made up the smallest number of respondents in this survey. Many of them reported on the same commitments made in other conservation categories such as forest management or habitat banking—so the amount of exclusive water investments is even smaller.

In terms of specific, targeted outcomes, respondents preferred more general terms like "water quality" or "water conservation" which they wrote in to the "other" sub-category (Figure 21). Because of the small number of respondents in this category, the data offers no particular details on the nature of these investments.

After "other," organizations committed the most money to watershed protection outcomes. In many cases, these commitments were noted by respondents to be part of broader investments in areas such as forestry or landscape-level investments across several categories, including habitat conservation, and sustainable food and fiber production. For example, one forest management company described an investment in timber lands that utilized conservation easements to protect some of the lands, including providing watershed protection benefits. This is clearly not an investment in water per se, but water as a co-benefit of a sustainable forestry investment.

Few commitments have been made in either water credits trading, water rights trading, or stormwater management, though there is some indication that interest in these areas is picking up. Outside of the scope of time for this survey (2004–2015), there have been recent developments in water investments. In 2016, the city of Washington, DC issued a $25M bond for stormwater. In the same year, The Nature Conservancy/NatureVest launched its new Australian Balanced Water Fund to trade water rights to ensure food security and restore wetlands in the Murray-Darling Basin in Australia. The Nature Conservancy/NatureVest also partnered with Encourage Capital and Prudential Financial to commit $1.7M to Washington, DC's Stormwater Retention Credit program. Nearby Prince George's County, Maryland, also recently launched a public-private partnership with Corvias Solutions to manage and finance $100M in green infrastructure projects.

Figure 21: Private Capital Committed in Water Quality and Quantity Sub-categories, 2004–2015



* These percentages are of the total capital committed from 2004 to 2008 and from 2009 to 2014. It is not the percentage of the average capital committed per year within those time periods.

Note: Based on responses by 31 organizations that reported making water quality and quantity commitments. Numbers may not add up to the totals due to rounding.

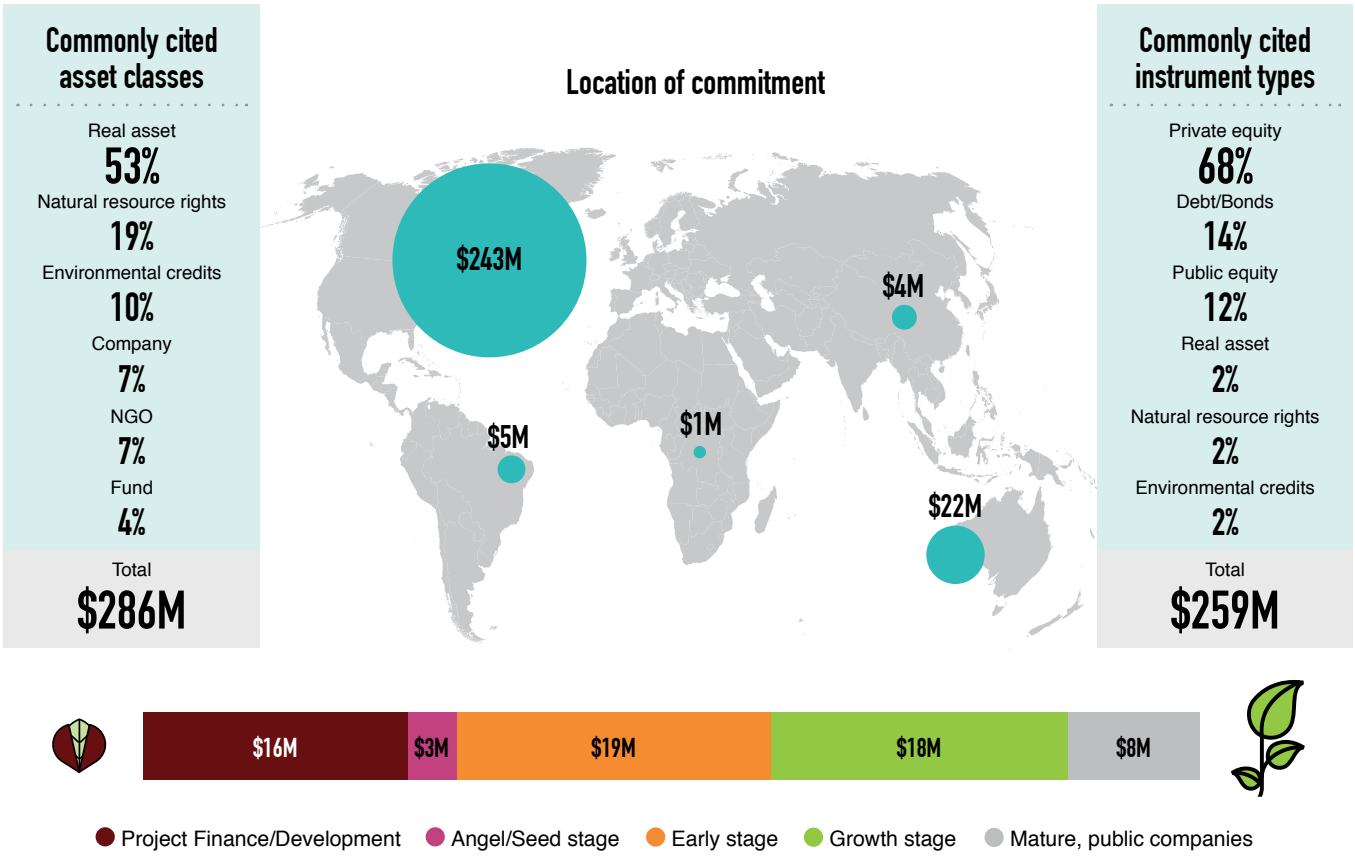
Methodology Tip: Respondents to this survey were asked to report on capital committed by intended conservation outcome. However, in many cases, organizations aimed to influence multiple outcomes. In these cases, respondents chose the primary outcome or split the capital committed across different outcomes.

Water Quality and Quantity: Concentrated as Real Assets in North America

Nearly all ($152M) water quality and quantity investments occurred in North America through acquiring real assets, typically land (Figure 22). The relative conformity compared to other conservation investment types can be attributed to the fewer investments made in this category.

Following real asset acquisition, respondents committed capital to acquiring natural resource rights (19%) and environmental credits (10%). Natural resource rights are common in water rights trading, even though they are not a common asset type for any of the other conservation categories.

Figure 22: Private Capital Committed to Water Quality and Quantity by Geography, Asset Class, Instrument Type, and Finance Stage



Note: Based on responses by 31 organizations that reported making water quality and quantity commitments.

Methodology Tip: Respondents did not always respond equally to these attribute questions. They often responded to questions that aligned most closely with how their organizations internally tracked investments. If a question required additional analysis, some respondents took the time to fill it out while others did not. Thus, the total number of responses may vary among the different attributes analyzed here.

Case Study 6: Creative Blended Finance Protects Water and Benefits First Nations Community

Funding for clean drinking water in the United States has long involved federal loans and grants for "gray" infrastructure: dams, piping, filtration, and treatment. Economic studies of natural or "green" infrastructure are demonstrating that protection of watersheds and stream buffers can provide enhanced water supply. The U.S. Environmental Protection Agency's (USEPA) Clean Water State Revolving Fund (CWSRF) loan program, administered by states, invests directly in conservation through loans and with negotiated IRRs, to fund non-point source pollution remediation and water supply protection projects.

In California, the Yurok Tribe of northern California provides a great example of creative use of the CWSRF loan program to protect critical water supplies. In 2010, the California State Water Resources Control Board authorized a loan of $18.75M from the CWSRF for the Yurok Tribe to make an initial watershed land purchase. The Yurok Tribe, working with the not-for-profit Western Rivers Conservancy, completed the purchase of 8,999 hectares in 2011.

The land, part of the Yurok's ancestral territory, will be sustainably managed for clean water and forest health. The purchased watershed land is part of the Yurok Tribal Community Forest. The Yurok's sustainable forestry management approach will significantly reduce non-point source water pollution, improve salmon habitat, protect forests, and provide carbon credits under California's cap-and-trade system.

A private forest investment company, **New Forests**, acquired and sold the carbon credits from the tribe. The tribe used the carbon credit revenue to repay the USEPA's CWSRF loan. In order to secure the entire project cost of $55.8M, Western Rivers Conservancy is using a mix of public and private funding including use of New Markets Tax Credits, carbon credit sales, grants from the state of California, the CWSRF, the U.S. Bureau of Indian Affairs settlement funds, as well as funding from private foundations and individual donors.

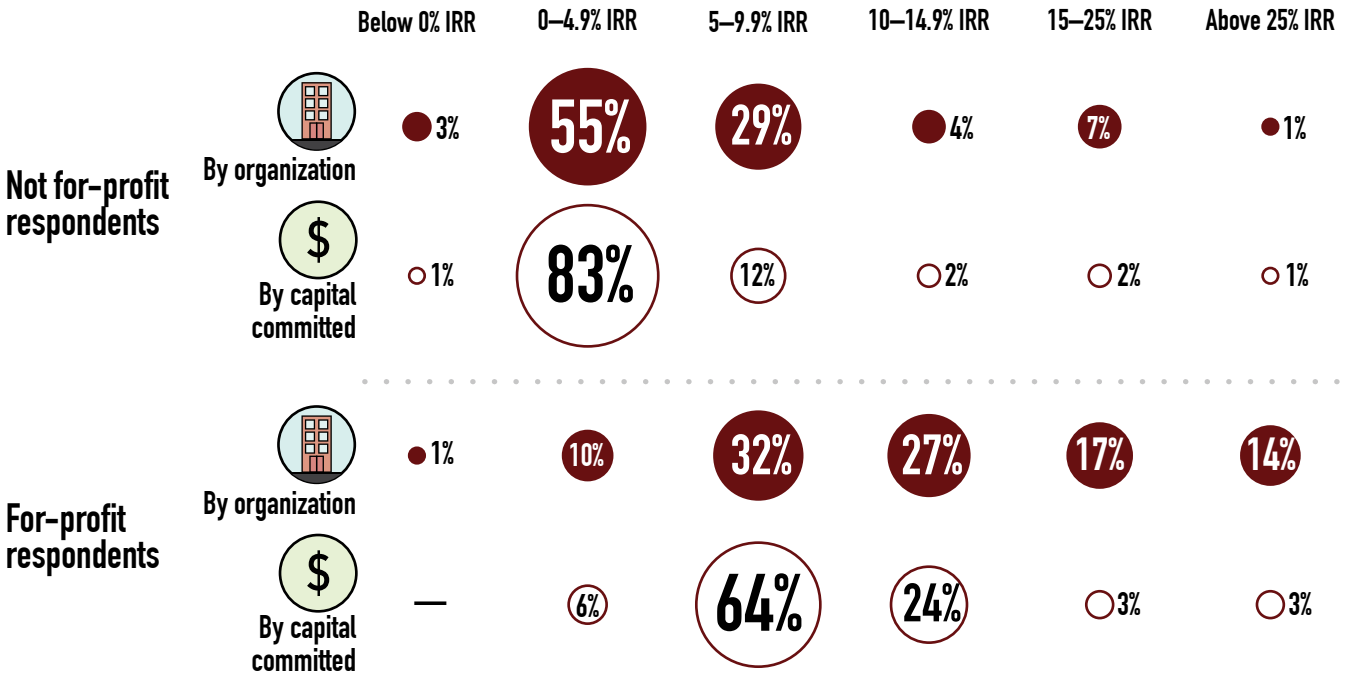
The Average Organization Predicted Returns of 5–9.9%

Across all tracked years, nearly a third of respondents (31%) anticipated returns between 5 and 9.9%, and the majority of investors reported that they are meeting or exceeding their performance expectations. Only 1% expected to record a loss at this point, while 10% expected more than 25% returns.

Delving deeper into the data, the majority (32%) of for-profit respondents cited 5–9.9% as the most common projected return, followed by 10–14.9% (27%) (Figure 23). Only 11% anticipated a return of less than 5%, while the remaining 31% anticipated returns of 15% or greater.

Unsurprisingly, for-profit organizations expected greater returns than not-for-profit organizations. Most not-for-profit respondents cited 0–4.9% as their projected return (55%), and about a third predicted it in the 5–9.9% range (29%). Only a handful expected higher returns (13%).

Figure 23: Projected Internal Rate of Return by Organization and Capital Committed, by Organization Profit-Status, 2009–2015



Note: Based on responses by 81 private organizations that reported making conservation commitments.

Methodology Tip: Organizations could provide anticipated IRR in a number of fields regarding their aggregated transactions per year or in terms of specific commitments made. Thus, the organization "count" within project IRR categories can include some cross-over, if an organization reported anticipating two or more IRRs within a single year.

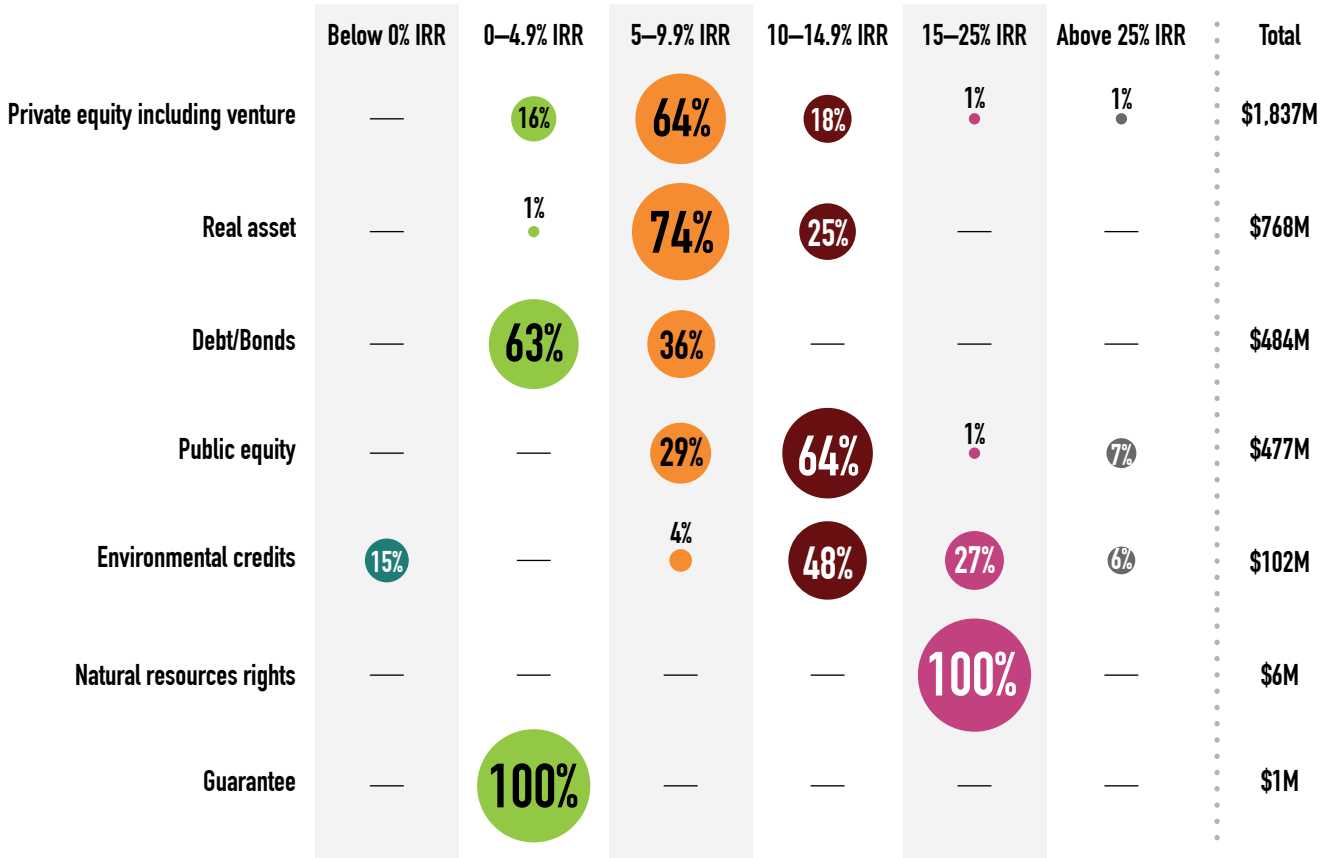
Projected Returns Diverged Most Among Instrument Types

Whether high or low, the projected returns associated with some investment attributes, such as debt or bond instruments (Figure 24 a) or company financial stage (Figure 24 d), were predictable. Returns based on other investment attributes, such as expected environmental credit returns, were less so (Figure 24 a).

Environmental credit investments, for example, entail greater risk for various reasons including the influence of public policy on the long-term viability of environmental markets. In these cases, a higher return would be expected. In other cases, compliance (government-driven) credit markets benefit from price floors, such as forest projects under the California cap-and-trade program, which help mitigate risk and support a consistent rate of return.

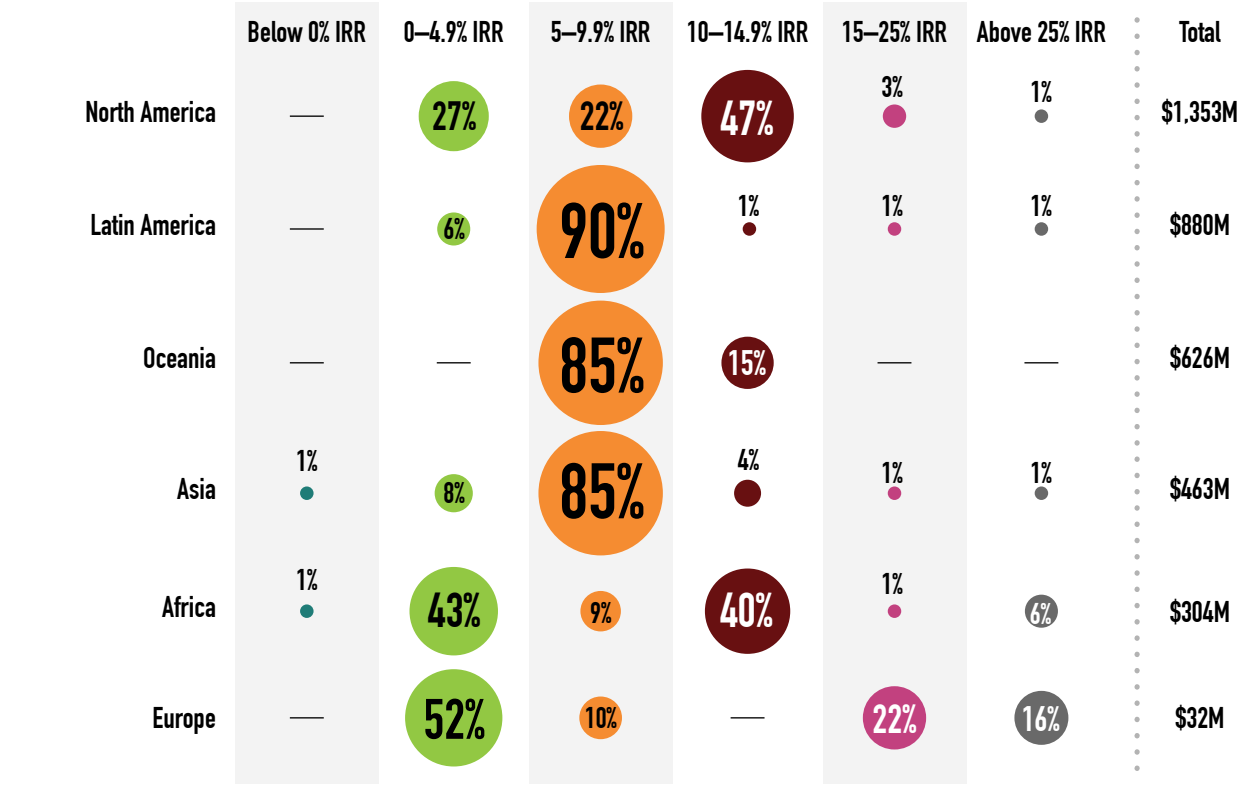
However, in the event of ambiguous or sometimes non-existent policies, the lack of clear demand signals can lead to highly variable profits that can negatively impact a return. In these cases, investors in some environmental credit projects seek to sustain a higher return by utilizing multiple revenue streams. For example, with forest carbon projects, carbon credits are typically one form of revenue and can be supplemented by additional forms of revenues, such as sustainable timber harvesting, agroforestry, or even favorable tax treatment with New Markets Tax Credits, land sales, or conservation easements.

Figure 24 (a): Projected Internal Rate of Return by Instrument Type, 2009–2015



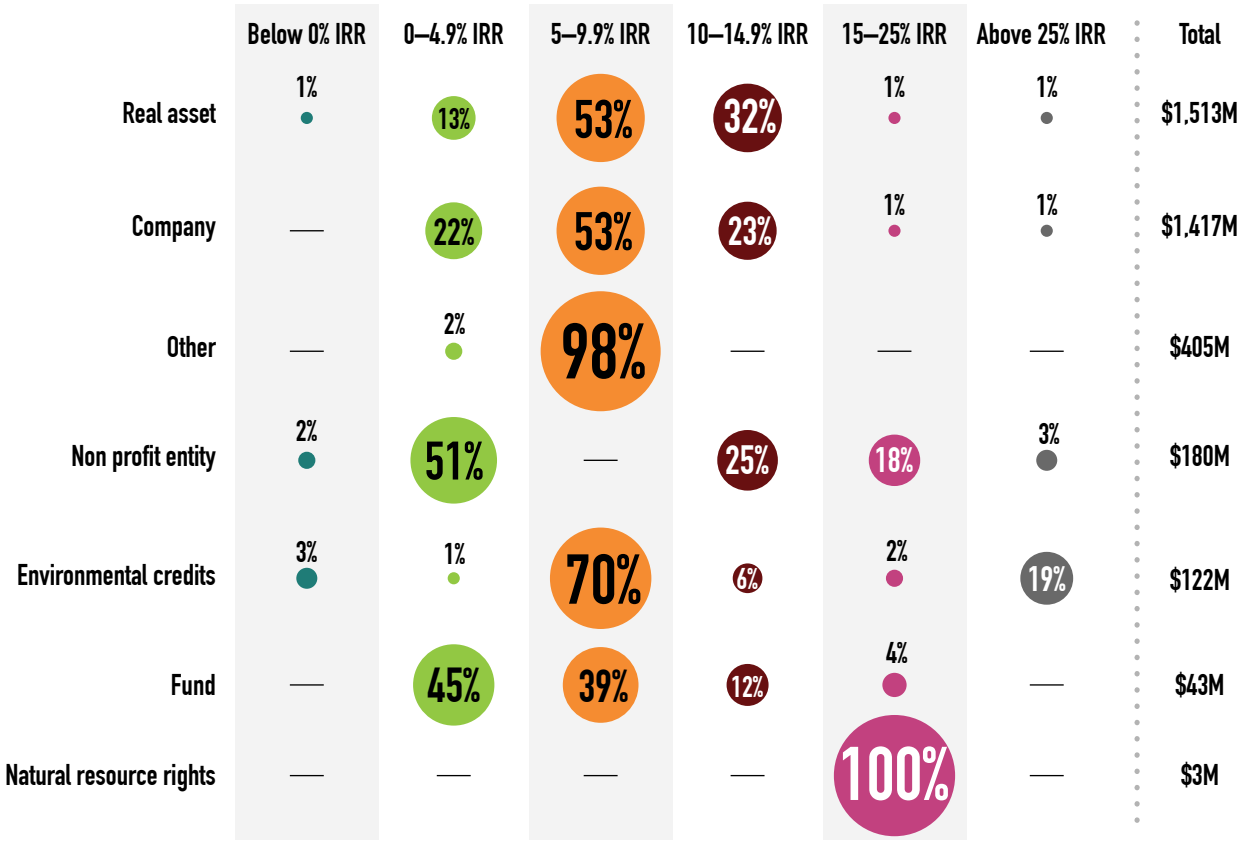
Note: Based on responses by 81 private organizations that reported making conservation commitments.

Figure 24 (b): Projected Internal Rate of Return by Location of Commitment, 2009–2015



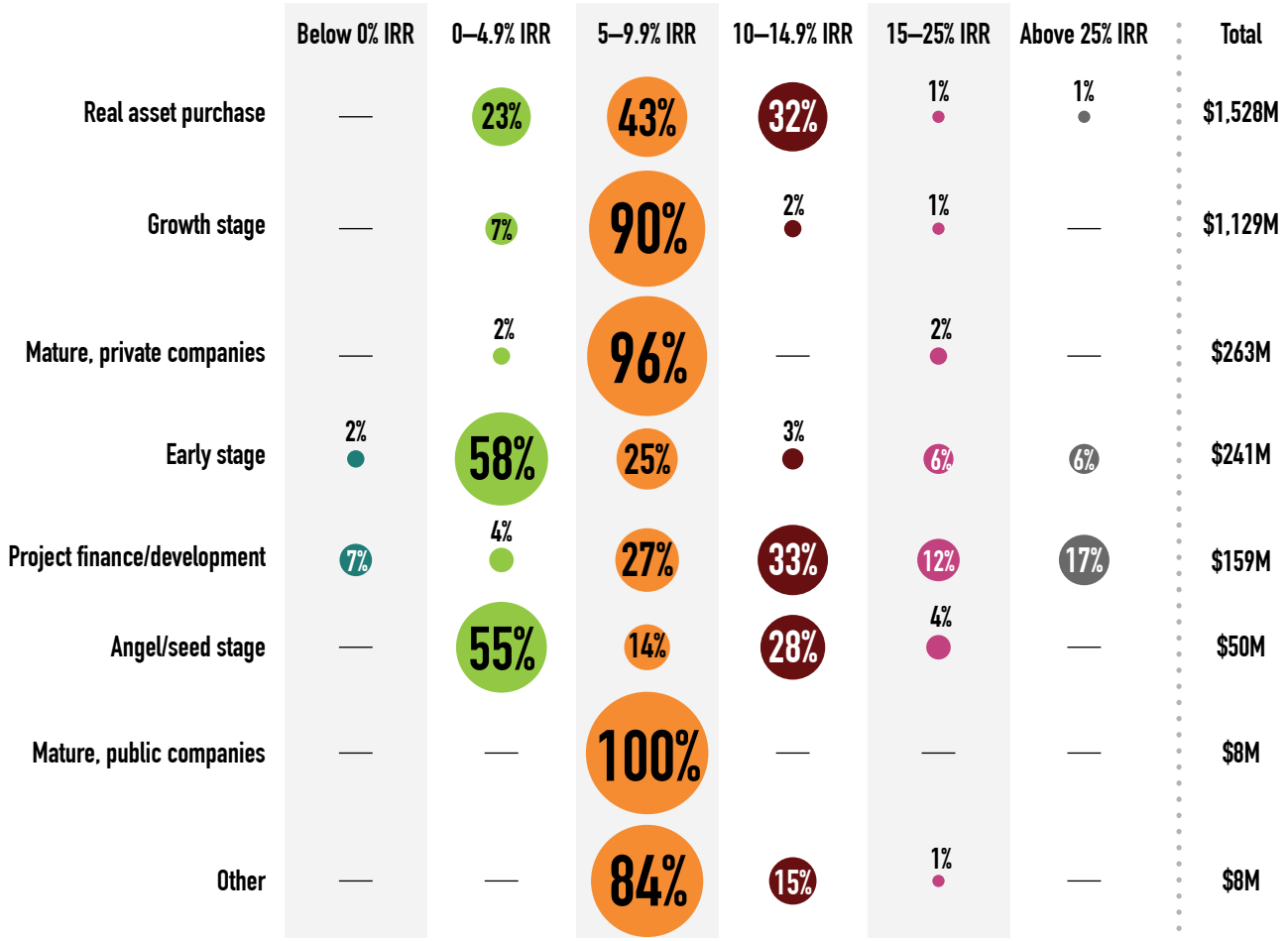
Note: Based on responses by 81 private organizations that reported making conservation commitments.

Figure 24 (c): Projected Internal Rate of Return by Asset Class, 2009–2015



Note: Based on responses by 81 private organizations that reported making conservation commitments.

Figure 24 (d): Projected Internal Rate of Return by Finance Stage, 2009–2015



Note: Based on responses by 81 private organizations that reported making conservation commitments.

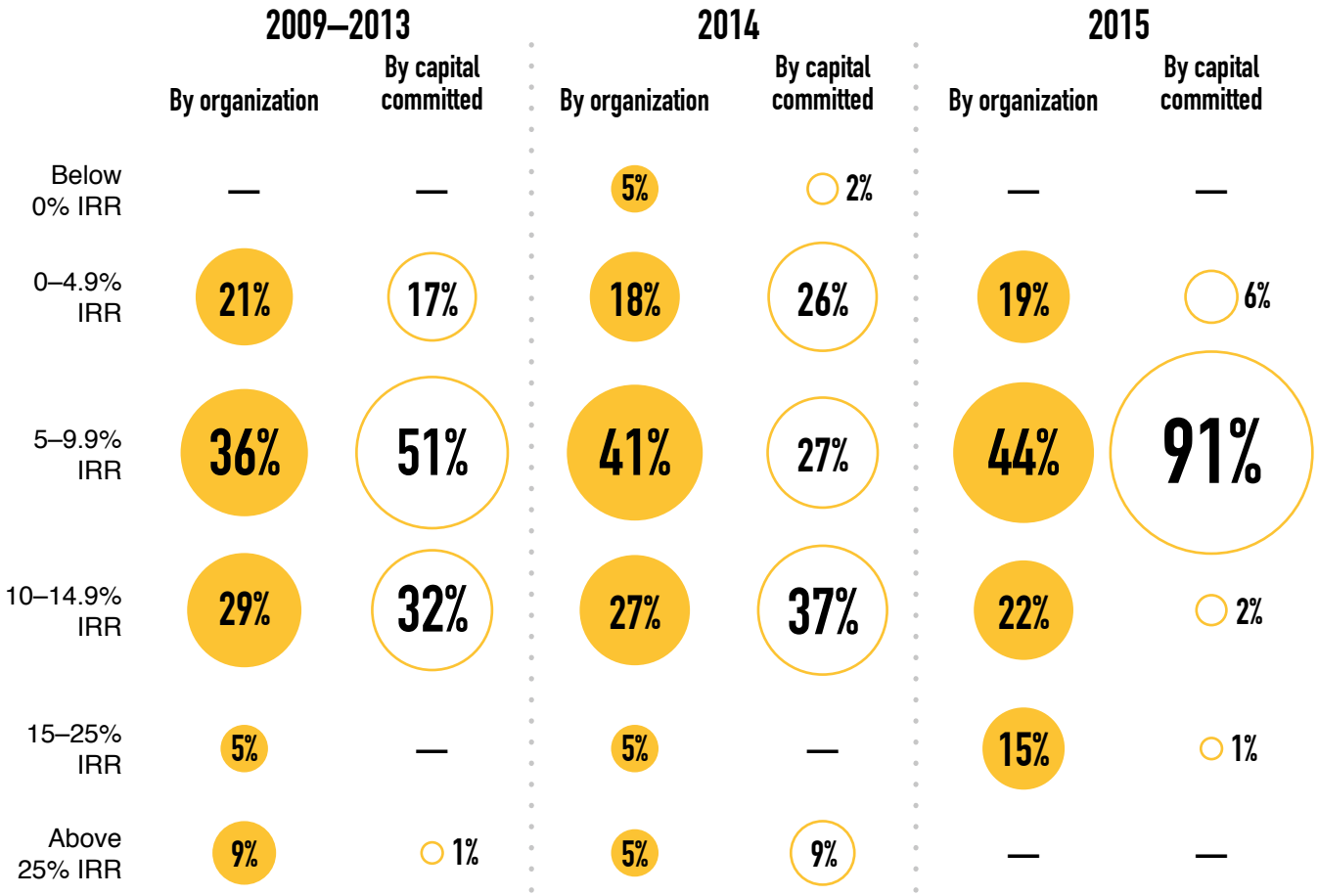
Sustainable Food and Fiber Production Commitments Driven by Assets, Predicted to Yield 5–9% Returns

At least half of the capital committed in both 2009–2013 and 2015 was predicted to yield 5–9.9% returns, while projected returns in 2014 were a bit more spread out across 0–14.9% (Figure 25). Since commitments in sustainable food and fiber production made up the bulk of responses, it is no surprise to see that most respondents reported anticipating returns of 5–9.9%.

These results can be explained in part by the expected returns for real assets versus private equity. Real assets, which are perceived as less risky (because risk is underpinned by the underlying asset, in this case land and forest assets), generally return in the 5–9% range. Private equity returns can be all over the map, but typically would end up in the mid-teens—in this case, likely between 10 and 14.9%—as investors predicted 24% of their capital's returns would be in that range.

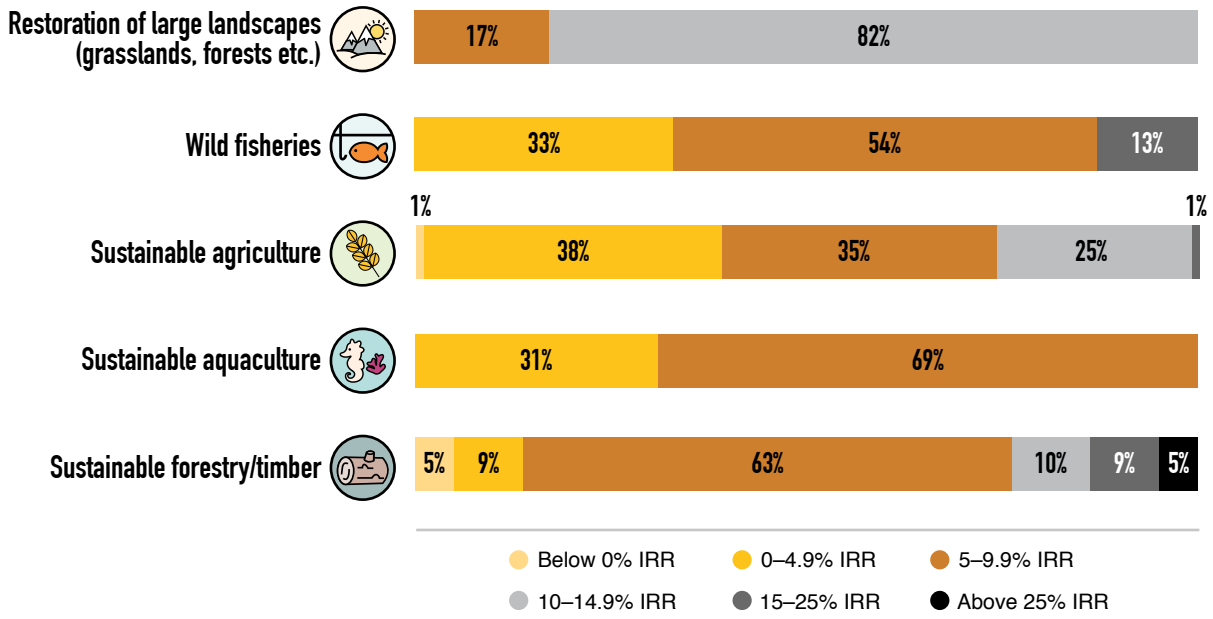
Even across conservation sub-categories, the dedication to the middle holds: respondents expected 5–9.9% returns for most sub-categories. Investors in restoration of large landscapes expected a higher average return (10–14.9%), but these investments only made up 2% of all reported capital committed (Figure 26). Investors in sustainable agriculture nearly equally expected returns between 0–4.9% and 5–9.9%.

Figure 25: Projected Internal Rate of Return for Sustainable Food and Fiber Production Commitments by Organization and Capital Committed



Note: Based on responses by 47 private organizations that reported making sustainable food and fiber production commitments.

Figure 26: Projected Internal Rate of Return for Sustainable Food and Fiber Production Commitments by Sub-category



Note: Based on responses by 47 organizations that reported making sustainable food and fiber production commitments.

Case Study 7: Major Companies Directly Invest in Sustainable Supply Chains

As part of their annual operations, thousands of companies make grants or carry out corporate social responsibility activities, and many others make investments designed to comply with pollution discharge or site mitigation requirements. Now, a handful of companies are starting to make actual investments, either internally or externally, in their supply chains in alliance with their strategic operations and in expectation for a financial return.

An example of this are commodity supply chains. In a recent major development, several hundred corporations have made commitments to source sustainably produced, or low- or zero-deforestation commodities, in particular for soy, palm, cattle, timber/pulp, coffee, and cacao.[13] As these companies are under pressure to meet their sustainability goals, a number of them are starting to make innovative investments in their supply chains.

In an effort to shore up its supply of sustainably produced coffee, **Starbucks** issued a $500M "Sustainability Bond" in 2015. Issued as a 10-year, 2.45% senior note, the majority of the $500M raised will be used internally. However, $50M is set aside for an innovative loan program to coffee growers to help them achieve Starbucks' ethical and social standards (an internal standard for social and health metrics, called Coffee and Farmer Equity practices) and to fund additional agronomy support services in targeted countries, starting in Chiapas, Mexico, with a particular intent to help growers combat coffee leaf rust.

[13] Supply Change website, accessed November 2016, http://www.supply-change.org.

Case Study 7 (continued): Major Companies Directly Invest in Sustainable Supply Chains

Meanwhile, **IKEA Group** has started investing in its own forest assets as part of a strategic goal to ensure a stable supply of sustainably produced forest products. To date, the company has purchased about 100,000 hectares of forest in Romania, Bulgaria, and the Baltics. These forest lands provide for a small part of their current forest product supply, but the company states that it will continue to expand its forest ownership, and it has provisioned over $1B for investing into forestry and other sustainable raw materials with the potential to further expand these investments. By comparison, the company has invested more than $2B in renewable energy generation and is producing more than 70% of its total energy consumption.

The purpose of acquiring forest assets is, in part, to help the company achieve the sourcing of sustainably managed (FCS-certified) timber products and paper, but also for a defined financial return. Company representatives described the intended return as a hedge against pricing fluctuations; a proper business investment in sustainable forest supply that is not blended in with philanthropic funds or corporate social responsibility desires; and purposeful financial management supported by the corporate finance department. These investments are part of a broader strategy within IKEA that includes major investments in energy self-sufficiency and potential future investments in other supply chains including aquaculture and wild fisheries.

In order to shore up its long-term sourcing of sustainable palm oil, **Unilever** has made a number of strategic investments in processing facilities and local suppliers. For example, the company is just launching an initiative in Central Kalimantan, Indonesia, targeting one district—Kotawaringin Barat—to support the transition towards sustainable palm oil smallholders through a village-based approach. Independent farmers will be financially supported to achieve both Roundtable on Sustainable Palm Oil and Indonesian Sustainable Palm Oil certification, but the project will take a jurisdictional approach through mapping and supporting the village administration to ensure that the sustainable production of palm oil is a priority for the village development agenda.

The Memorandum of Understanding Unilever has signed with the provincial government, the district government, and a local delivery partner (Institut Penelitian Inovasi Bumi (INOBU), an Indonesian research institute) is the first public-private partnership agreement among subnational governments and an international buyer to support a new jurisdictional sourcing approach for sustainable palm oil. To facilitate this and similar jurisdictional, sustainable commodity-sourcing projects, Unilever is seeking to repurpose its investments and also to increase the participation of bilateral, multilateral, and private partner investors to take such efforts to a much larger scale.

For-Profits Expected Higher but Variable Returns in Habitat Conservation Commitments than Not-for-Profits

Respondents most frequently predicted an IRR in the 0–4.9% range for their commitments in habitat conservation (Figure 27). When associating projected return rates with capital committed, the actual capital committed (44% across all years) was expected to yield a 0–4.9% return, followed by another 30% that was expected to yield a return in the 5–9.9% range.

While respondents most often predicted returns in the 0-4.9% range, a more in-depth look at the data reveals bigger differences between respondent profit status: 96% of not-for-profits predicted such returns. In contrast, for-profit respondents projected higher returns on average: 33% predicted 5–9.9%, while another 27% predicted returns above 25% IRR.

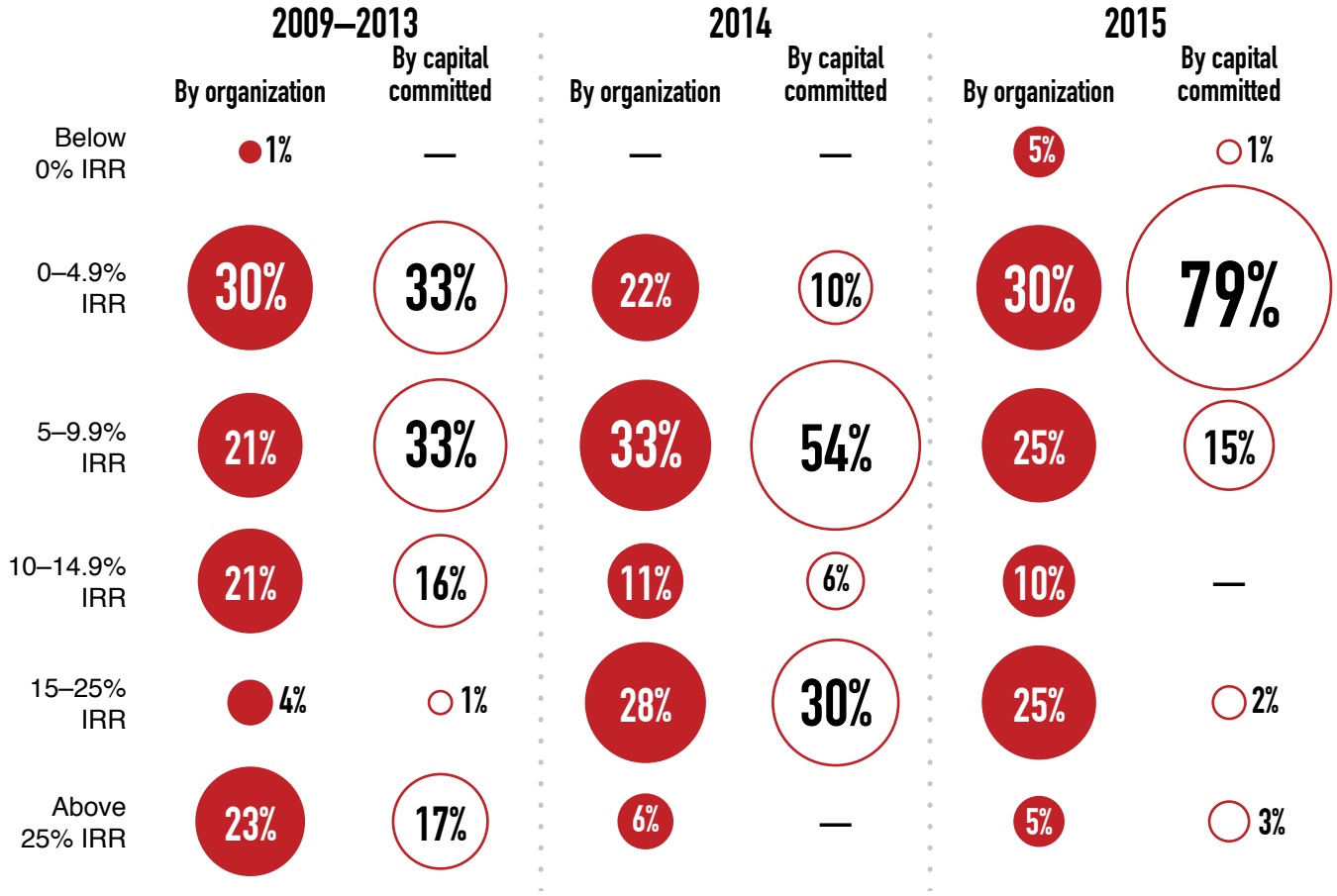
Three-fourths (75%) of the capital committed to direct land ownership (which made up the largest sub-category) was expected to yield a return in the 0–4.9% range (Figure 28). Projected returns for investments in land easements all fell in the 0–9.9% range. This survey assumes that use of easements is included as a means to add either revenue or preferential tax treatment to an investment in order to contribute to the higher return projections.

By contrast, investors in environmental markets (mitigation banks and forest carbon) typically had higher expected returns with 22% of capital committed to forest carbon investments being expected to yield above 25% IRR. Almost all (99%) capital committed to mitigation banking investments was expected to yield between 10 and 25%. The reason for expected higher returns is most likely linked to the higher risk associated with these markets.

Compliance forest carbon markets and mitigation banks both rely on compliance programs for demand (and, in the case of some cap-and-trade programs, active price management and floors). In the case of voluntary offset markets, prices fluctuate much more due to uncertain sources of buyers. Return from these types of investments is likely to be most affected by the level of risk (driving up investment return expectations). However, corollary work by Ecosystem Marketplace on the financial details of forest carbon projects shows that these projects can spread risk by stacking revenue from a variety of sources.[14] These sources can include revenue from the sale of sustainable timber, agroforestry products, carbon offsets, and more, which helps to explain the higher-than-average expected returns.

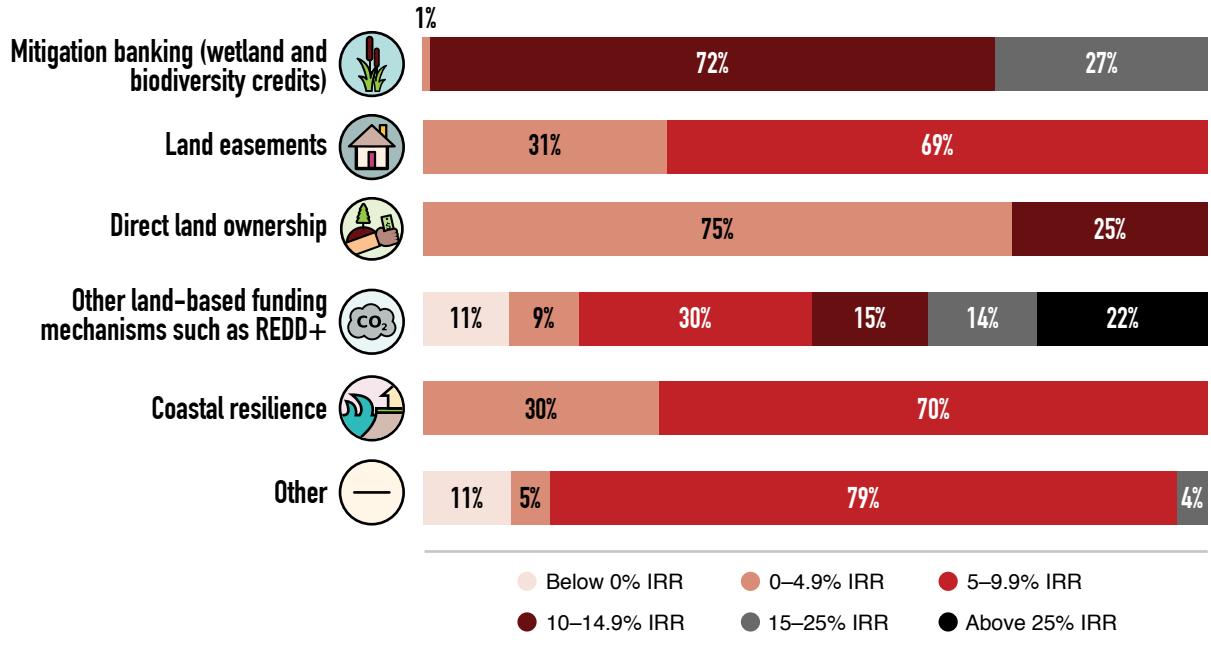
[14] Goldstein, Allie. *Not So Niche: Co-benefits at the Intersection of Forest Carbon and Sustainable Development.* Washington, DC: Forest Trends, 2016. Accessed October 20, 2016. http://forest-trends.org/releases/p/not-so-niche.

Figure 27: Projected Internal Rate of Return for Habitat Conservation Commitments by Organization and Capital Committed



Note: Based on responses by 35 private organizations that reported making habitat conservation commitments.

Figure 28: Projected Internal Rate of Return for Habitat Conservation Commitments by Sub-Category



Note: Based on responses by 35 organizations that reported making habitat conservation commitments.

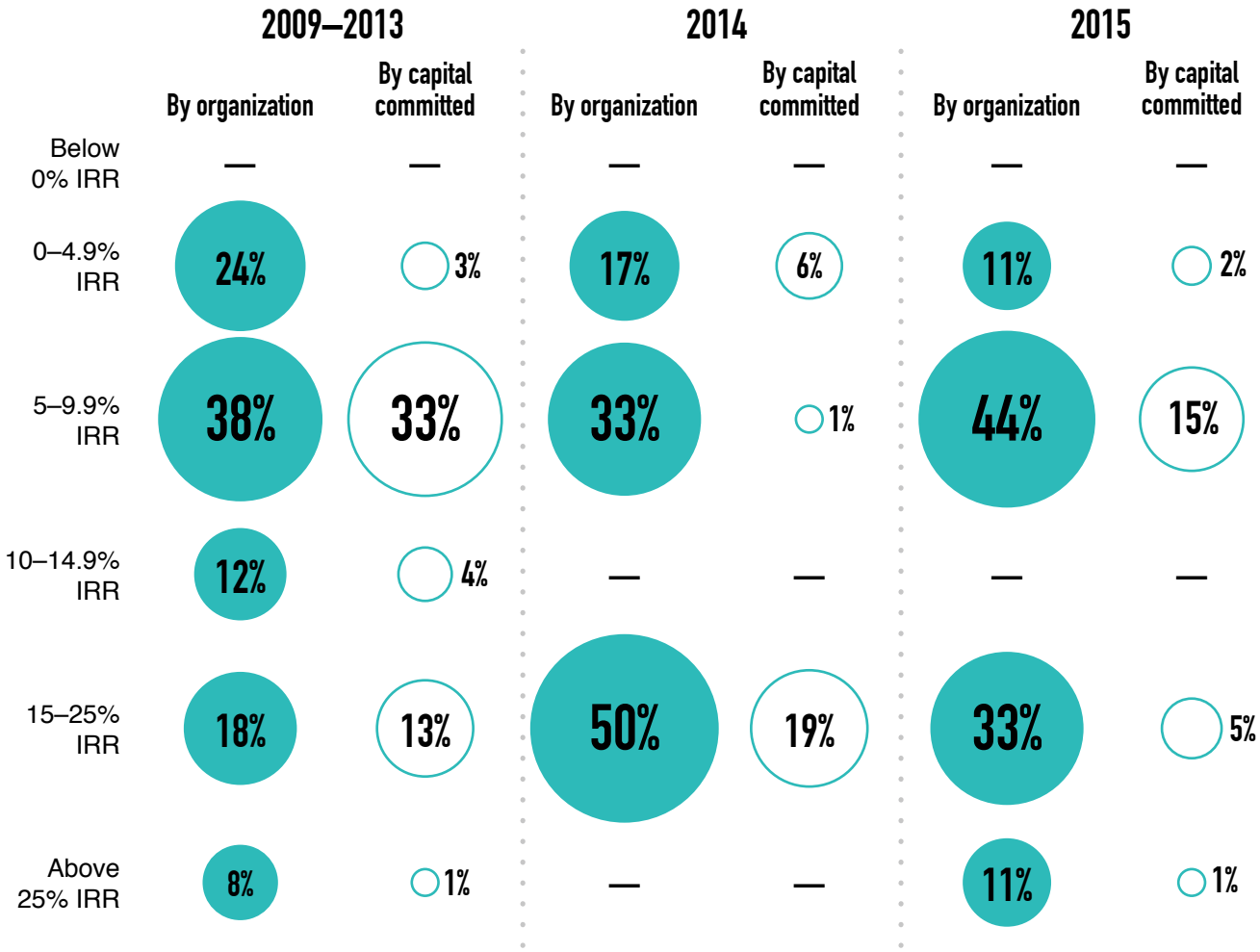
Newer Water Markets Reflected Higher Risks and Returns

Most respondents (40%) estimated a 5–9.9% IRR for commitments in water quality and quantity, followed by 15–25% (24%) and 0–4.9% (22%) (Figure 29). Of the capital committed, 58% was expected to have 5–9.9% IRR, followed by 26% expected to have 15–25% IRR. However, fewer conclusions should be drawn from this data, as it represents the smallest response.

Looking at results expected by specific outcomes, organizations committing to both water rights and water credits trading estimated returns in the 15–25% range (Figure 30). These higher returns can be attributed to the newness and volatility of these markets, which often have tenuous or irregular government support, resulting in a higher risk for potential investors.

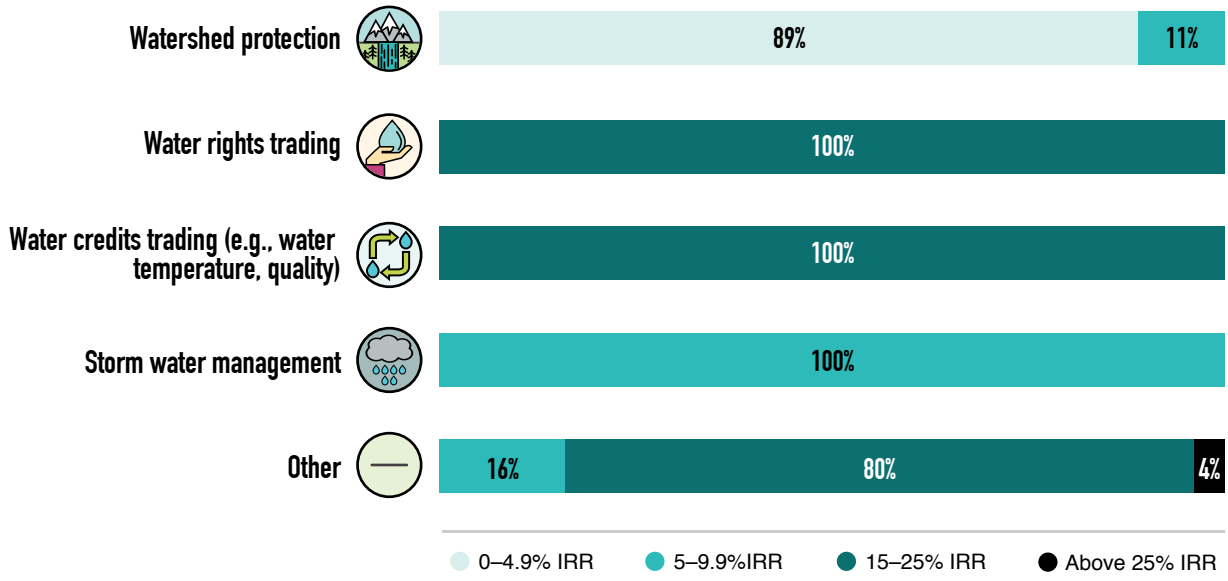
In contrast, watershed protection had the lowest return expectations with most capital committed expected to return 0–4.9%. This matches the projected IRR for direct land ownership reported under habitat conservation outcomes, which sometimes represented the same investment (respondents thought both were equal conservation outcomes and split the amounts noted in their responses).

Figure 29: Projected Internal Rate of Return for Water Quality and Quantity Commitments by Organization and Capital Committed



Note: Based on responses by 26 private organizations that reported making water quality and quantity commitments.

Figure 30: Projected Internal Rate of Return for Water Quality and Quantity Commitments by Sub-category



Note: Based on responses by 26 organizations that reported making water quality and quantity commitments.

Case Study 8: Blue is the New Green—Conservation Bonds Finally Emerging, Especially in Water

Bond issues with the label "green" have grown dramatically in recent years. The Climate Bonds Initiative, an organization which tracks green bonds, has reported green bond issues in excess of $60B in 2016 alone. The overall majority of these are for urban infrastructure, alternative energy development, renewable energy, or other areas that might be described as regular municipal or corporate uses with a "green" element or label. However, there is evidence outside of the scope of this survey that some conservation practices may have finally broken through to this important emerging area of investing.

For example, the District of Columbia Water and Sewer Authority issued a $350M taxable bond (100-year bond, 4.8%) in 2014 to finance part of a massive $2.6B effort to control wastewater overflows into area waterways, improving water quality and providing other biodiversity and climate resilience benefits. This was the first "certified" green bond issued in US debt capital markets with an independent second-party sustainability opinion.

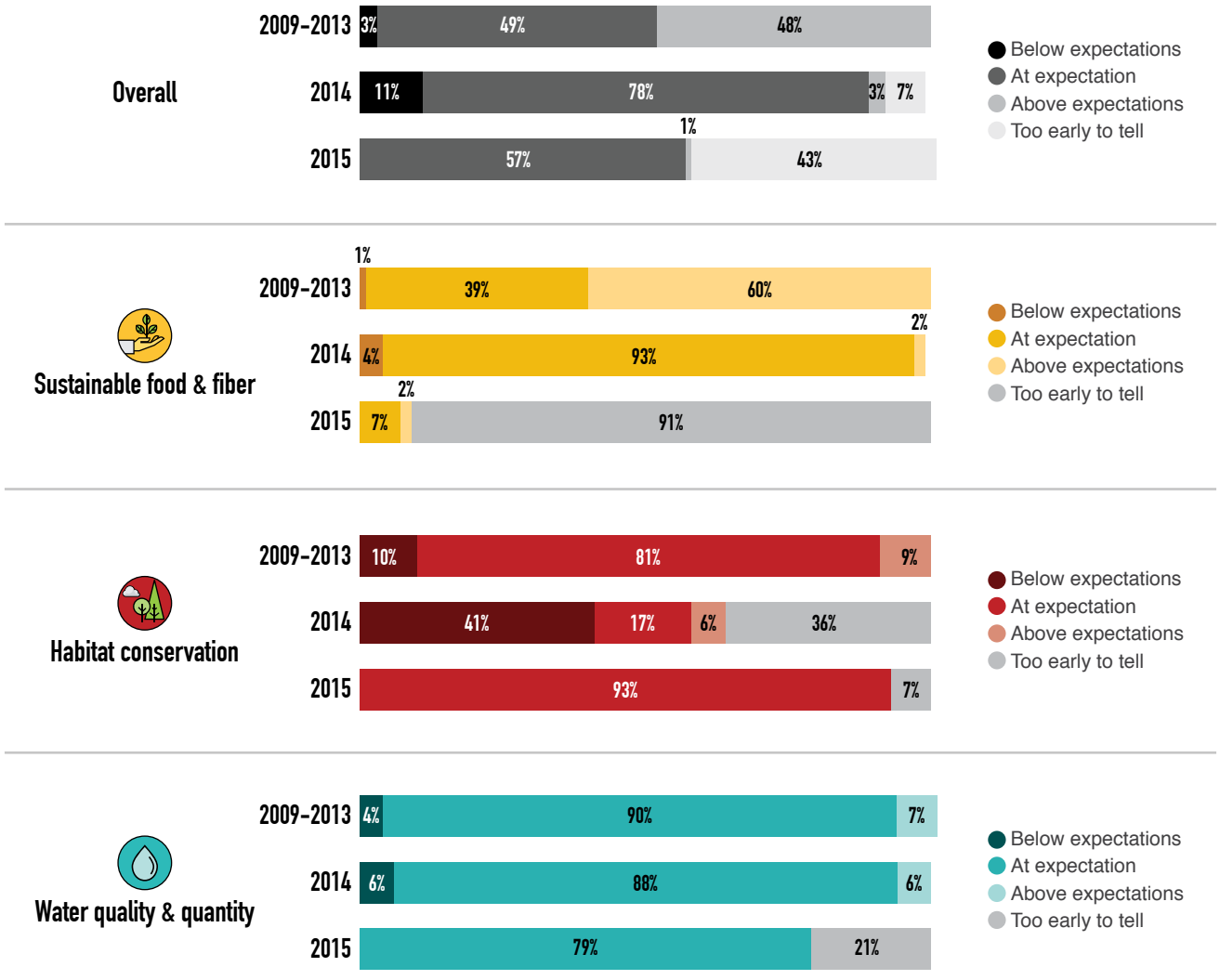
Several US states and cities have followed suit. In the years 2014 to 2016, New York City, San Francisco, Portland (Oregon), and state of Massachusetts have issued certified green bonds ranging from $200M to $500M primarily for traditional water supply and infrastructure projects, but increasingly also for stormwater management projects, and for natural watershed and wetland protection.

Most Conservation Commitments Performed as Expected; (but) Some Sustainable Food and Fiber Investments Exceeded Expectations

Most respondents said their commitments resulted in realized returns in line with their expectations (Figure 31). However, 2009–2013 investments were an exception, with 48% of capital committed during those years making returns above expectations. The bulk of these outperforming commitments stemmed from sustainable food and fiber production commodity investments.

Most habitat investments performed as expected as well, although 41% of committed capital in 2014 performed below expectations. This was largely driven by a single organization whose underperforming commitment made up 67% of all reported capital in 2014. Water investments also performed as expected.

Figure 31: Realized Internal Rate of Return to Date by Conservation Category



Note: Based on responses by 16 organizations that reported exiting conservation commitments.

Box 5: Investment Exits Largely on Par with Expected Returns

Only 17 survey respondents reported exiting at least one investment between 2009 and 2015. Although that number is low, it is interesting to note that 82% of respondents reported that their investments (either singly or in aggregate) remained in line with expectations, with two underperforming and one outperforming expectations.

How do these returns compare to actual private equity returns from non-conservation impact investments? A new study from investment consultant Cambridge Associates and the Global Impact Investing Network15 shows that private equity and venture capital funds with reported impact missions produce roughly the same returns as funds trying to maximize financial returns alone. Some 51 impact funds, which invested in businesses that help people or causes and that were launched between 1998 and 2010, returned an average of 6.9% per year to investors through June 2014 versus 8.1% for 705 non-impact funds.

[15] Jessica Matthews, David Sternlicht, Amit Bouri, Abhilash Mudaliar, and Hannah Schiff, *Introducing the Impact Investing Benchmark* (Cambridge, MA and New York: Cambridge Associates and Global Impact Investing Network, 2015), https://thegiin.org/assets/documents/pub/Introducing_the_Impact_Investing_Benchmark.pdf.

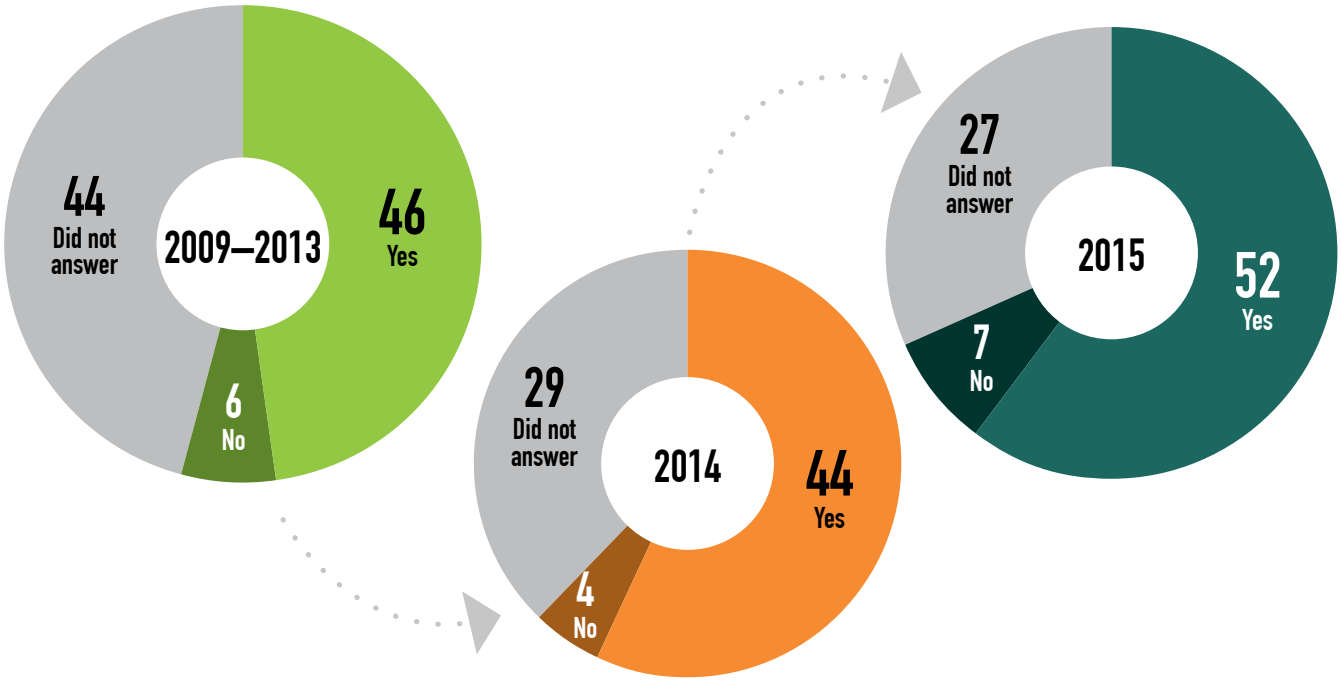
Each Year, More Organizations Claim to Measure and/or Report Conservation Impacts

More and more organizations have reported monitoring and/or reporting on conservation impacts over the past few years, as reported by 60% of organizations in 2015 (up from 48% in 2009–2013)—the highest percentage in any year covered by this survey (Figure 32).

Just because an organization says they monitor and/or report on impacts, does not mean they report on all investments in this manner. However, the same trend was seen in the more detailed transactional responses, with organizations reporting 89% of investments as monitoring and/or reporting on conservation impacts and only 9% not attempting to do so and 2% abstaining from this question.

While there appears to be a generally adoptive trend towards monitoring and/or reporting, the specific metrics used for monitoring vary widely. Actual impacts are reported on pages 46–48.

Figure 32: Number of Organizations Monitoring and/or Reporting Conservation Impacts over Time



Note: Based on responses (or non-responses) by 96 organizations that reported making conservation commitments from 2009 to 2013, 77 that reported making conservation commitments in 2014, and 86 that reported making conservation commitments in 2015.

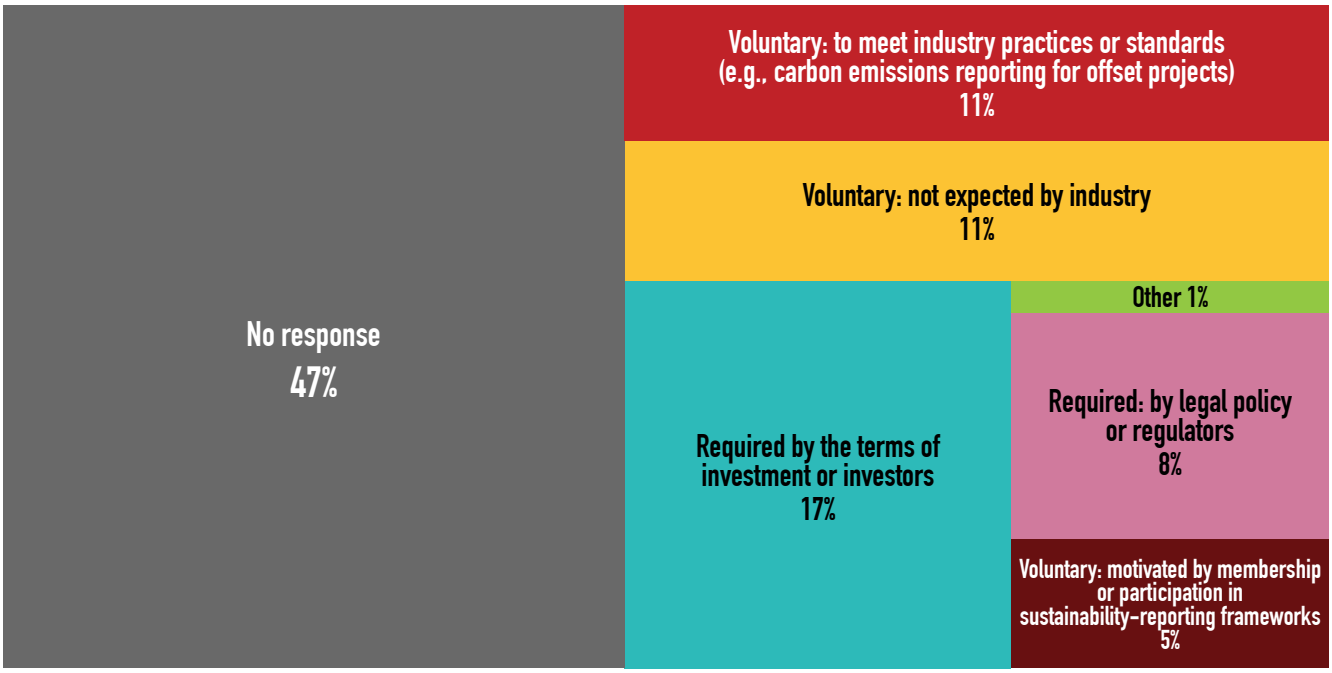
Methodology Tip: Organizations that committed capital in more than one year may report the same conservation measurement actions every year. Those repetitions are included in this figure in order to get an accurate understanding of the overall percentage of organizations monitoring by year.

The Majority of Organizations Reported on Impacts to Meet Investor Requirements, Followed by Those Reporting Voluntarily

Nearly all respondents who said their organization measured or reported impacts provided follow-up insights into motivation and processes. In general, the majority of organizations claimed they monitored and reported on impacts voluntarily or because of their own initiative to conform with industry practices (Figure 33). How organizations measured impact differed substantially between these two categories: around 70% of organizations that were motivated entirely voluntarily used their own internal standard, while around 90% of organizations that were motivated by industry practice used a third-party standard.

However, the most commonly cited reason for monitoring impact was that it was required "by the terms of the investment or by the investors." Most organizations used internal standards for this (an average of 82% of organizations across all reported years). In contrast, investors motivated by legal policy or regulators used a third-party certification (an average of 76% across all years).

Figure 33: Organizational Motivation for Monitoring and/or Reporting, Aggregated Across All Years



Note: Based on responses (or non-responses) by 96 private organizations in 2009–2013, 76 organizations in 2014 and 86 organizations in 2015.

Methodology Tip: Organizations that invested for more than one year may report the same measurement actions every year.

Internal Criteria Most Commonly Used to Measure Impacts; Third-Party Frameworks Most Commonly Used to Verify Carbon Emissions

From 2009 to 2015, there has been a trend towards increased monitoring and reporting of the intended conservation impacts of investments, both using internal criteria as well as a third-party standard or certification body. In 2015, respondents reported the highest use of monitoring and reporting, with 35% using internal criteria and 23% using a third-party certification or standard (Figure 34).

In general, respondents stayed consistent in the type of monitoring they used, with 37 (out of 42) organizations reporting no change in metrics from 2009–2013 to 2014, and 49 (out of 50) reporting no change in metrics from 2009–2013 and/or 2014 to 2015.

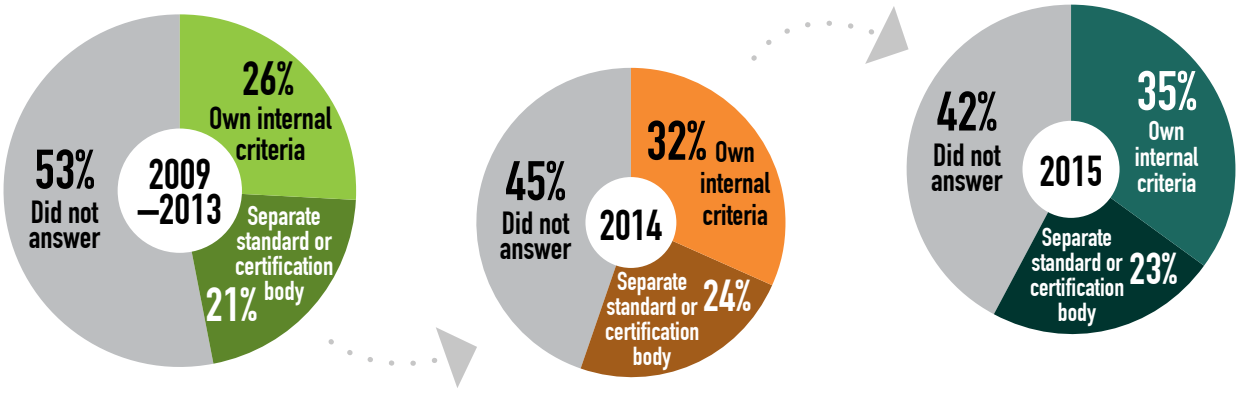
What third-party standards and certifications did investors use? Responses to this open question consolidated around three different themes: carbon offsets, sustainable forestry or agriculture, and reporting frameworks.

The majority of respondents using a third-party standard cited a carbon offset standard. Typically, they mentioned voluntary carbon standards (mostly the Voluntary Carbon Standard; Voluntary Carbon Standard and Climate, Community and Biodiversity Alliance; Climate Action Reserve; American Carbon Registry; and Gold Standard) but a few also listed the California market compliance standard and the UN Clean Development Mechanism. Some respondents also reported using FSC certification—sometimes in addition to carbon standards, other times as a stand-alone certification.

Organic certification was noted by a number of respondents as well, presumably associated with sustainable agriculture investments. Interestingly, no respondents noted any of the agricultural commodity sustainability certification bodies such as the Roundtable on Sustainable Palm Oil, Roundtable on Responsible Soy, or others.

Finally, there were a number of organizations that measured impact according to a sustainability reporting framework. Most listed using the Impact Reporting and Investment Standards (IRIS) to measure and report impact, sometimes combined with the Global Impact Investing Rating System (an initiative by the Global Impact Investing Network and B Analytics that uses IRIS metrics to provide third-party ratings of impact investments). Others mentioned B-Lab or B-Corp certification. A few others mentioned the Principles for Responsible Investment, the International Finance Corporation environmental and social performance standards, or the International Financial Reporting Standards.

Figure 34: Organizations that Monitor or Report on Conservation Impacts by Time Periods



Note: Based on responses by 45 private organizations that reported monitoring conservation impacts in 2009–2013; by 42 private organizations that reported monitoring conservation impacts in 2014; and by 50 private organizations that reported monitoring conservation impacts in 2009–2013.

Case Study 9: Some Investors Turn to Internal Metrics to Go Beyond Third-Party Certifications

The means by which investors and funds tracked the conservation impacts of their investments varied widely by investor and by conservation investment type. Some investment types, such as forest carbon offsets and habitat banking, were compelled to report via strict monitoring and verification rules required by market regulators (habitat banking) or by industry standards (voluntary forest carbon offsets). Others, like sustainable agriculture, lacked usage of consistent or clear metrics.

Many respondents noted the use of third-party metrics such as FSC certification, carbon standards, or the Global Impact Investing Network's IRIS metrics. Interestingly, a small number of respondents reported creating their own internal set of metrics for measuring sustainability or conservation impact. While internal criteria lack the comparative ability of standards or certification schemes, it is technically possible that a company's own metrics can go further in measuring and achieving actual impact. Two examples that stood out in the findings offer varying details on whether a company's specific set of metrics is stronger or weaker than more mainstreamed certification programs:

Althelia Ecosphere's first fund started out focused on carbon and still utilizes a voluntary carbon standard to verify their emissions reductions. But as the company's investment profile evolved, the company decided to invest in a comprehensive evaluation process whereby it gathers information beyond what its third-party carbon standard requires. Now Althelia reports on seven distinct impact areas, including climate, species, and livelihoods, and provides a series of detailed key performance indicators under each of the categories.[16]

Finally, the efforts of coffee-shop chain **Starbucks** to understand the needs of its farmers and producers led them to create its own social impact standards (Coffee and Farmer Equity practices), which include measures to protect water quality and preserve biodiversity.

[16] "Our Impacts Monitoring," Althelia Ecosphere, accessed December 7, 2016, https://althelia.com/our-approach/our-impacts-monitoring/.

Sustainable Food and Fiber Production: Impacts and Metrics

Respondents reported that a total of 6.9M hectares from 2009 to 2013 have been conserved through sustainable agriculture, sustainable forestry/timber, and restoration of large landscapes (Figure 35). In general, 96% of hectares were managed for conservation impacts, so the investments typically did not contain non-conservation-oriented elements.

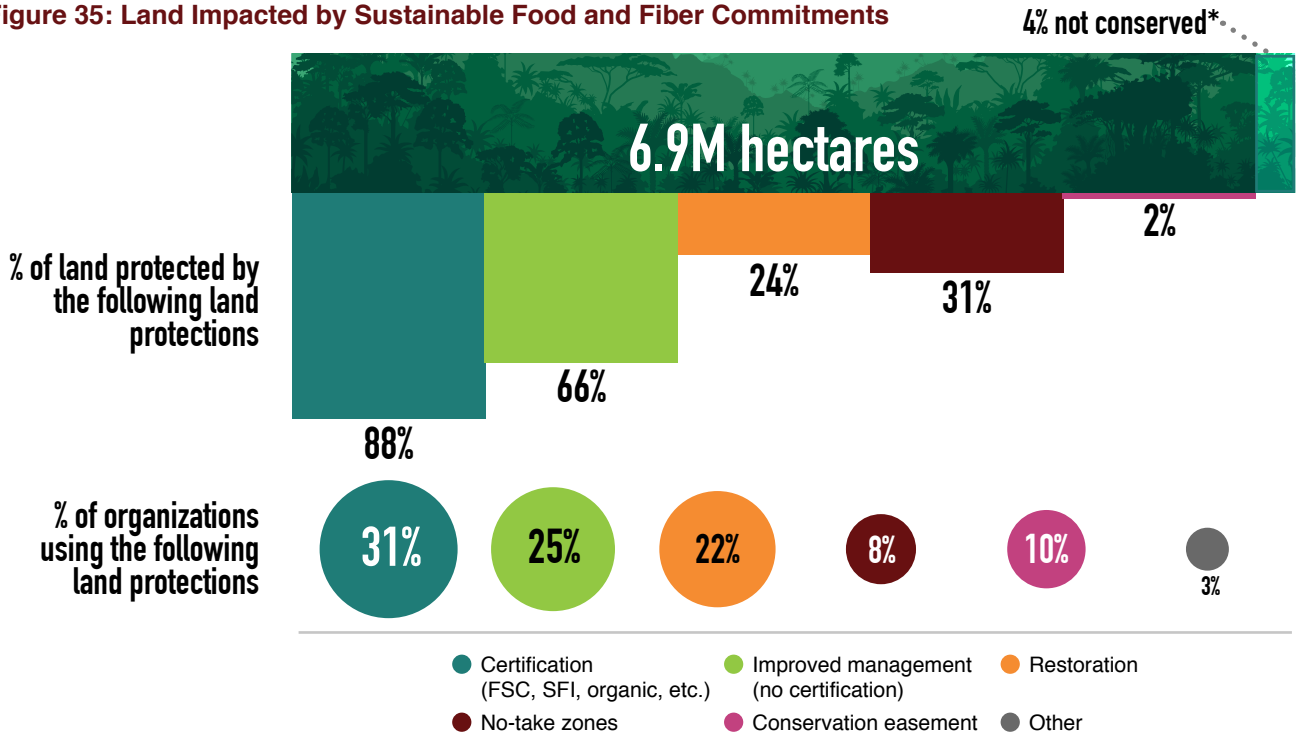
Certification is the most commonly cited means of protection—both in the number of organizations claiming it and in the number of reported hectares conserved. For sustainable agriculture investments, organic certification was the most often used measure. Sustainable forestry investments listed FSC certification as most frequently used. A few respondents mentioned a handful of other standards, including the Programme for Endorsement of Forest Certification, the Sustainable Forestry Initiative, Rainforest Alliance, Fairtrade, non-Genetically Modified Organisms, and more.

Among forestry-related investments, improved forest management was the second-most cited protection followed by restoration. However, the areas restored were smaller than no-take zones (where fewer organizations reported utilizing this type of protection, but which protected greater amounts of land).

Only a handful or organizations reported impacts related to sustainable fisheries or aquaculture. Wild fisheries investments cited minimizing bycatch and minimizing adverse economic impacts for fishing communities as the top two goals. Slightly less attention was given to minimizing environmental disturbances and increasing fishing community access to total allowable catch quotas or individual transfer quotas, while few sought to increase the number of vessels using electronic monitoring and reporting.

Only one organization reported sustainable aquaculture impacts, so no broader trends can be gleaned. That organization prioritized reducing feed inputs from wild-caught fishmeals and oils followed by decreasing antibiotic use and reducing the number of escaped farmed organisms.

Figure 35: Land Impacted by Sustainable Food and Fiber Commitments



Note: Based on 36 aggregated responses and 11 transaction-specific responses.

Methodology Tip: If any organization reported committing capital across years to the same recipient, the hectares impacted are not counted multiple times.

Habitat Conservation: Impacts and Metrics

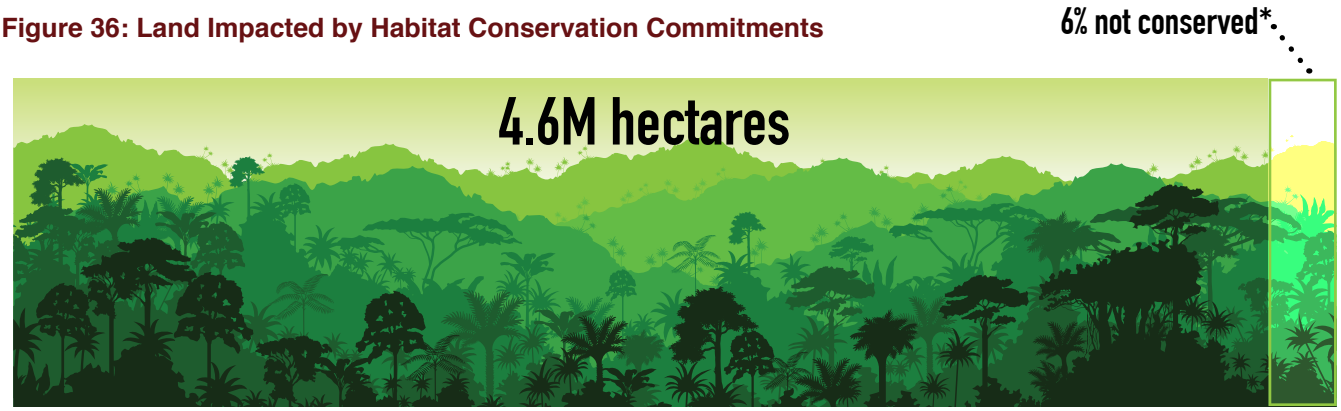
As in the case of sustainable food and fiber production commitments, the majority (94%) of hectares covered by habitat conservation investments serves a conservation purpose (Figure 36). Respondents committing capital to direct land acquisition, land easements, or forest carbon projects reported the results of their investment in terms of land impacted. Terrestrial impacts ranged from reducing deforestation or cutting down on carbon emissions to protecting wildlife corridors or endangered species.

Organizations reporting the use of third-party standards often invested in forest carbon. Respondents cited both the California compliance standard and voluntary carbon standards, among which the Verified Carbon Standard, the Gold Standard, and the Climate Action Reserve were most prevalent.

Unlike in the case of many other conservation outcomes, the vast majority of forest carbon projects follow strict standards to monitor, report, and verify emissions reductions. All projects result in carbon offsets—verified emissions reductions equal to one tonne of carbon dioxide equivalent. In this survey, forest carbon projects reported reducing from less than 25 $KtCO_2e$ per year to more than 4.4 $MtCO_2e$ per year. On average, annual emissions reductions hovered around 1.2 $MtCO_2e$.

These estimates are larger than average; according to Ecosystem Marketplace's *State of the Forest Carbon Markets 2014* report, medium projects annually reduce 20 $KtCO_2e$–100 $KtCO_2e$, while large mega-projects annually reduce more than 1 $MtCO_2e$.[17] It is possible that the responses in this survey cite higher carbon emissions reductions because these projects have been scaled up in order to attract investment.

Figure 36: Land Impacted by Habitat Conservation Commitments



Note: Based on 22 aggregated responses and 12 transaction-specific responses.

Methodology Tip: If any organization reported committing capital across years to the same recipient, the hectares impacted are not counted multiple times.

Like forest carbon projects, most mitigation banks follow universally applied government rules to ensure a conservation outcome, in this case, mitigation credits that represent areas of wetlands, streams, or species habitat that are evaluated and monitored under USFWS and USEPA rules. While science-based metrics are used to calculate the amount of hectares or acres protected and restored, the market is based on the sale and transfer of credits.

Finally, coastal resilience impacts included the establishment of no-take zones or marine protected areas. Other impacts were broader, recognizing people as the drivers of coastal degradation and focusing on improvement of livelihoods or poverty reduction.

[17] Allie Goldstein, *Turning over a New Leaf: State of the Forest Carbon Markets 2014* (Washington, DC: Forest Trends' Ecosystem Marketplace, 2016), http://www.forest-trends.org/documents/files/doc_4770.pdf.

Water Quality and Quantity: Impacts and Metrics

Since there are no major certifications or metrics for water quality and quantity investments, respondents provided open-ended responses to the survey questions on impacts and metrics.

Most organizations reported seeking impacts for commitments in the sub-category of watershed protection. Respondents typically described impacts in terms related to habitat conservation, using words like "conserved," "restored," or "protected." In many cases, the stated impact was broader than watershed protection. Two organizations also noted that the goals and measurement didn't just relate to conservation-oriented outcomes but also to socio-economic ones around livelihoods, and cultural and recreational opportunities. Another two organizations focused on protecting watersheds in order to safeguard threatened species.

No common metrics were used to describe these impacts aside from typical land-based measurements (hectares and acres), though a few organizations did note that they reported via standardized impact investing metrics standards such as IRIS, the Global Reporting Initiative, and the Sustainability Accounting Standards Board.

No organizations provided details about measuring impacts in the sub-category of water trading rights, though presumably any monitoring requirements would be expressed in legal contracts. Impacts in the sub-category of water credits trading similarly saw a dearth of responses, although this is a developing area of science in terms of monitoring and verification of nutrients or stormwater runoff from various practices.

Other impacts and measurements mentioned included temperature, phosphorous avoidance, sediment avoidance, and water volume kept in streams. Finally, investors in the sub-category of stormwater management mentioned measuring the gallons of stormwater managed.

Investors Intend to Deploy at Least $3.1B from 2016 to 2018

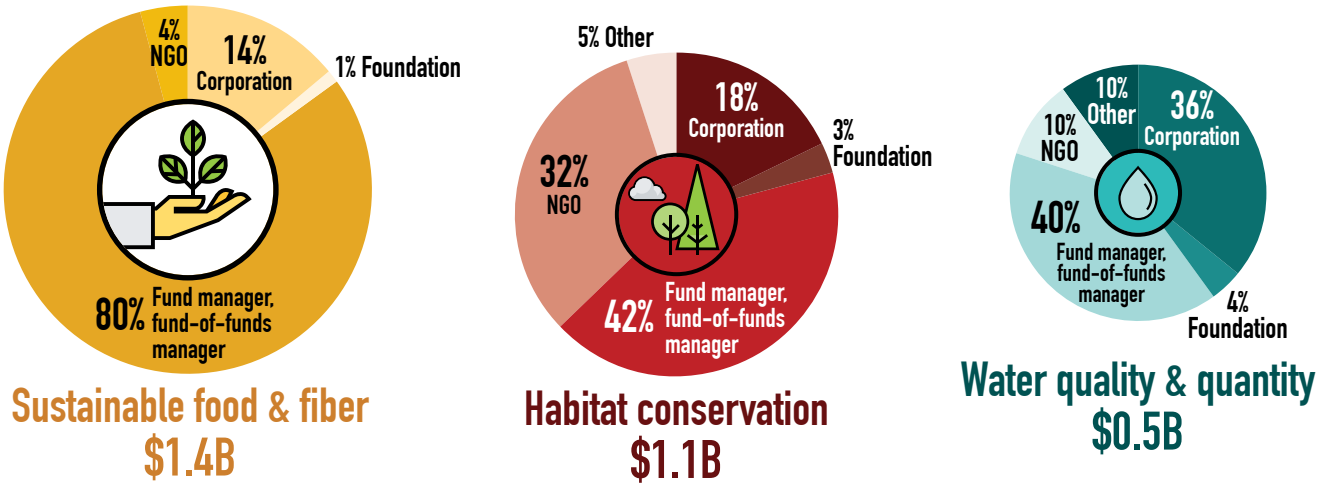
Across all three conservation categories, the survey identified $3.1B in undeployed capital. Within that total, investors intend to deploy $1.4B in *already-raised capital* into food and fiber production investments over the next few years (Figure 37). Fund managers reported having the bulk of this money (80%), followed—at some distance—by corporations (14%). Respondents also have rosy expectations for raising future capital. Most organizations (36) anticipated raising *new capital* or reallocating their existing non-conservation funds into future sustainable food and fiber production investments (Figure 38). Overall, these organizations estimated that they would raise or reallocate more finance than they invested in 2013–2015; another 14 reported they will continue to raise similar amounts.

While food and fiber production investments outpaced habitat conservation investments during the years from 2004 to 2015, the gap seems to be closing a bit. Investors in habitat conservation reported that they intend to deploy $1.1B in already-raised capital, a similar amount to that promised by sustainable food and fiber production investors. Furthermore, a majority (25) of organizations reported that they intend to raise or reallocate more new capital than what they invested in 2013–2015; a further seven report they will continue to raise similar amounts, while only three reported that they will raise less capital than in 2013–2015.

Fewer investors report on intending to deploy more water quality and quantity capital, though the anticipated $0.5B is still significant compared to the total capital historically committed to water quality and quantity ($0.4B from 2004 to 2015). Fund managers and corporations reported intending to deploy nearly equal amounts of capital—this is the only place where the commitments from corporations nearly equal those from fund managers. The reason for this might be that not as many investments in this area are at a scalable level. Still, a majority (22) of organizations reported that they intend to raise or reallocate more new capital than they invested in 2013–2015; a further six reported they will continue to raise similar amounts.

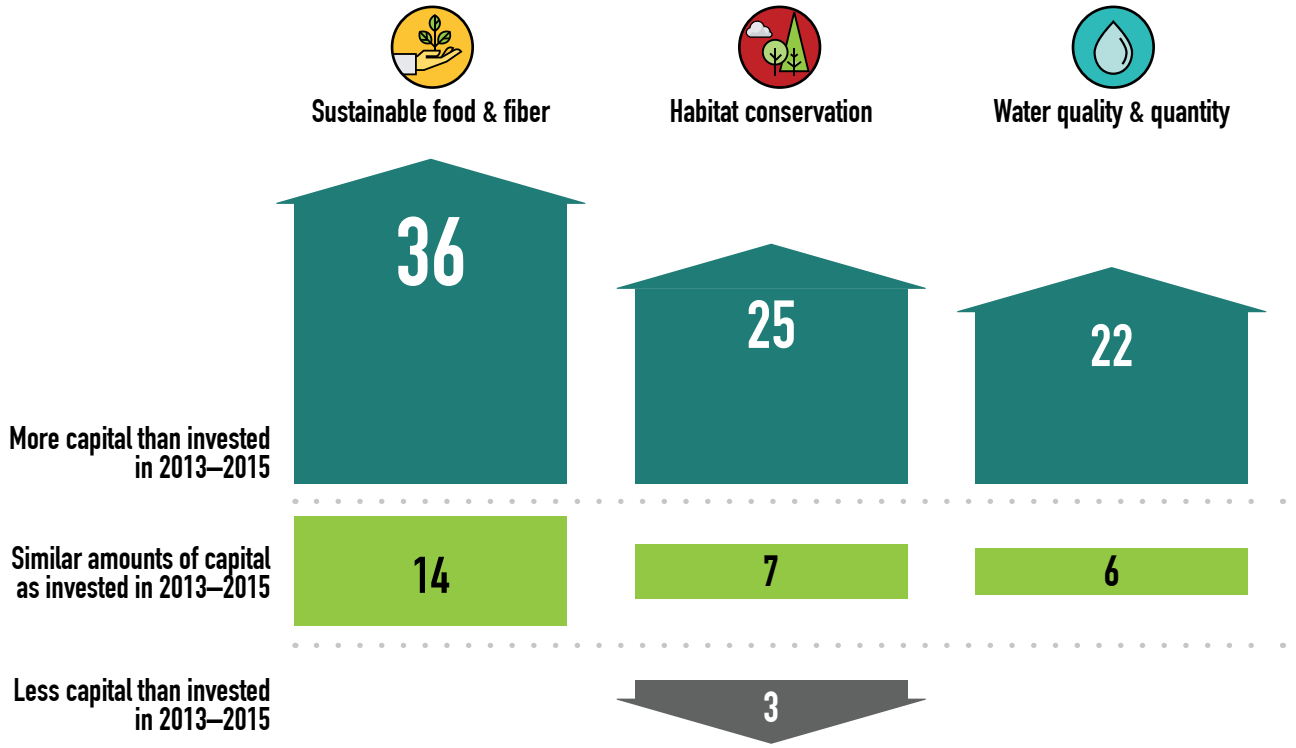
In addition to the conservation investments recorded in the current survey (see Methodology section) the researchers noted 29 organizations that are considered active in conservation investing but that did not participate in the survey and an additional 48 organizations that indicated that they were not currently investing in conservation but are considering doing so in the future. As such, there could be as many as 77 organizations with additional accumulated, or soon-to-be raised, capital and with the intent of committing some or all of these funds to conservation investments.

Figure 37: Already-raised Capital that Respondents Intend to Deploy in 2016–2018 by Conservation Category and Organization Type



Note: Based on 35 responses by organizations reporting un-invested capital in sustainable food and fiber, 27 by organizations reporting un-invested capital in habitat conservation, and 17 by organizations reporting un-invested capital in water quality and quantity.

Figure 38: Capital that Respondents Intend to Fundraise or Re-allocate in 2016–2018, by Conservation Category



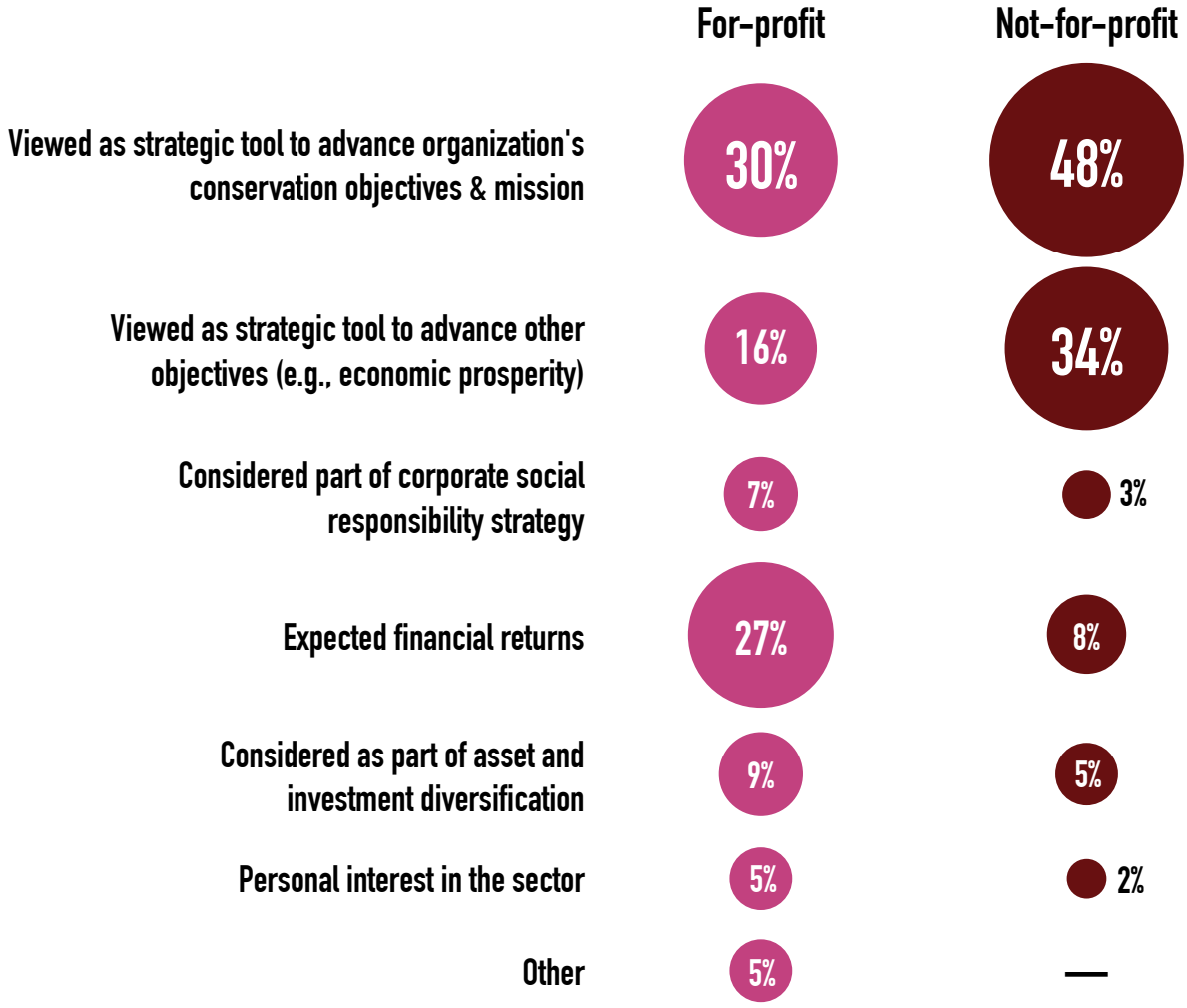
Note: Based on 65 organizations reporting intended future capital commitments.

For-Profit Investors Motivated Evenly by Conservation Impacts and Financial Returns, Not-for-Profits Driven by Conservation Impacts

When asked about their overall motivations for making conservation investments, for-profit respondents ranked conservation objectives about the same (30%) as financial return (27%) (Figure 39). This response changed from 2014, when for-profit organizations had ranked financial returns as the top motivation for making conservation-related investments (with the percentage of organizations choosing financial returns and conservation objectives reversed). Of those organizations responding in both 2014 and 2016, 61% selected a different primary motivation, indicating that motivations may be flexible within organizations over time.

Not-for-profits chose conservation objectives (48%) as their top motivation, followed by other non-financial objectives (34%). Financial return ranked much lower for these organizations, with only 8% choosing it as a primary or secondary concern.

Figure 39: Motivation for Making Conservation Investments by Organization Profit Type



Note: Based on responses by 120 organizations. Respondents were asked to choose two motivations, one primary and one secondary. Primary responses were weighted 1.5 times the secondary responses to keep consistency with weighting used in the 2014 report.

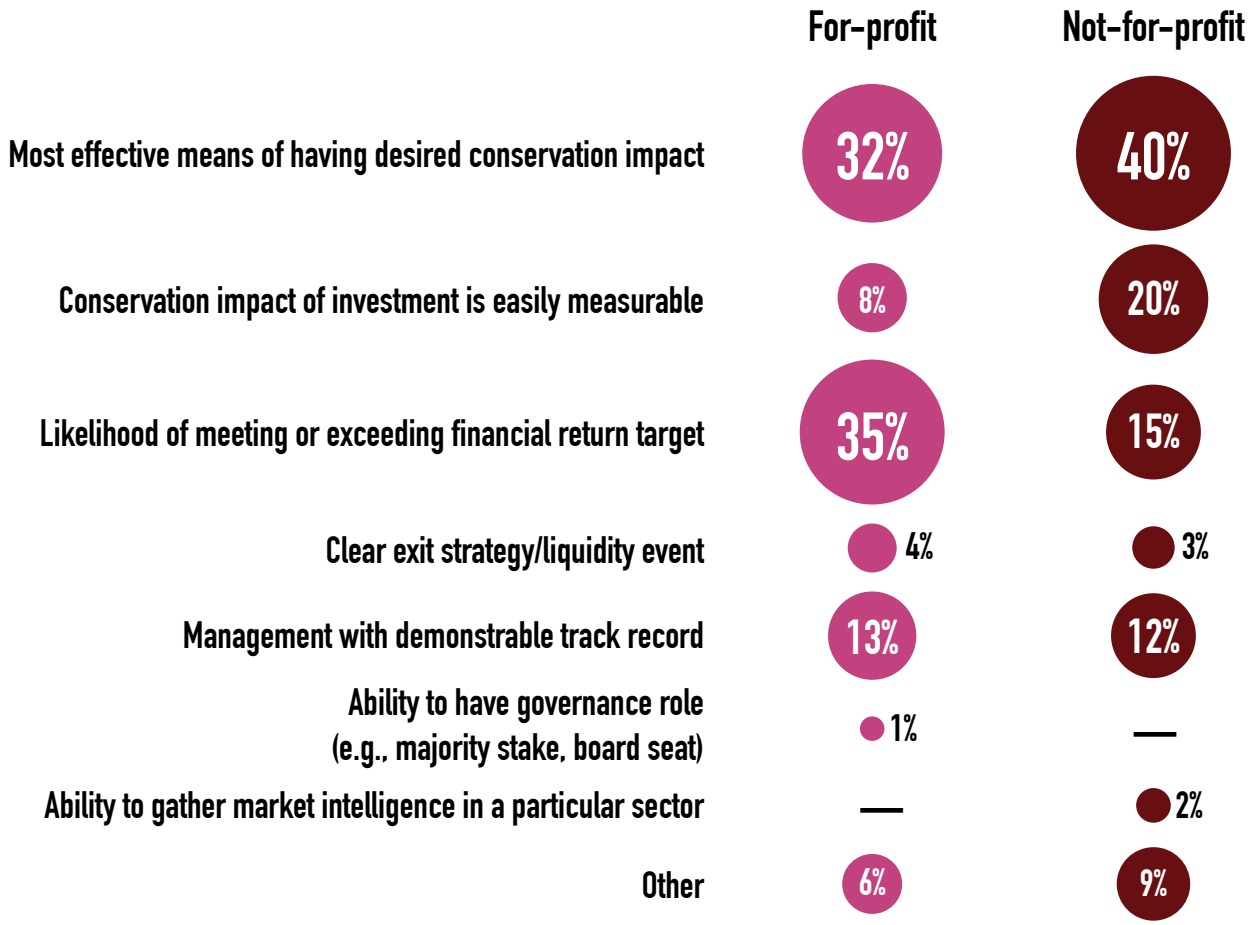
When Selecting Deals, Private Investors Tilted Toward Financial Returns Over Conservation Impacts

While for-profit investors reported being more *motivated* by conservation objectives when asked about their top *criteria for actually selecting* an investment, they prioritized meeting or exceeding financial returns slightly higher (Figure 40). Not-for-profit institutions ranked conservation impact as the most important investment criterion and ranked financial return third.

Both for-profit and not-for-profit organizations generally ranked "big picture" responses, conservation impact or financial return, higher in their selection criteria. More specific criteria (ability to gather market intelligence, ability to have a governance role) did not concern as many respondents. Organizations responding to the "other" category typically chose that category because they couldn't decide between two or more criteria they saw as equally important, or noted a more niche concern.

Across all investor types, most of the top investment criteria remained the same as in 2014: typically, financial return and conservation impact ranked high. Not-for-profits paid additional attention to the measurement of conservation impact, and for-profits took note of management with a demonstrable track record. While half of all respondents that participated in both the 2014 and 2016 surveys changed their primary criteria, no clear trends arose from the new choices.

Figure 40: Criteria for Making Conservation Investments by Organization Profit Type



Note: Based on responses by 118 organizations. Respondents were asked to choose two selection criteria, one primary and one secondary. Primary responses were weighted 1.5 times the secondary responses to keep consistency with weighting used in the 2014 report.

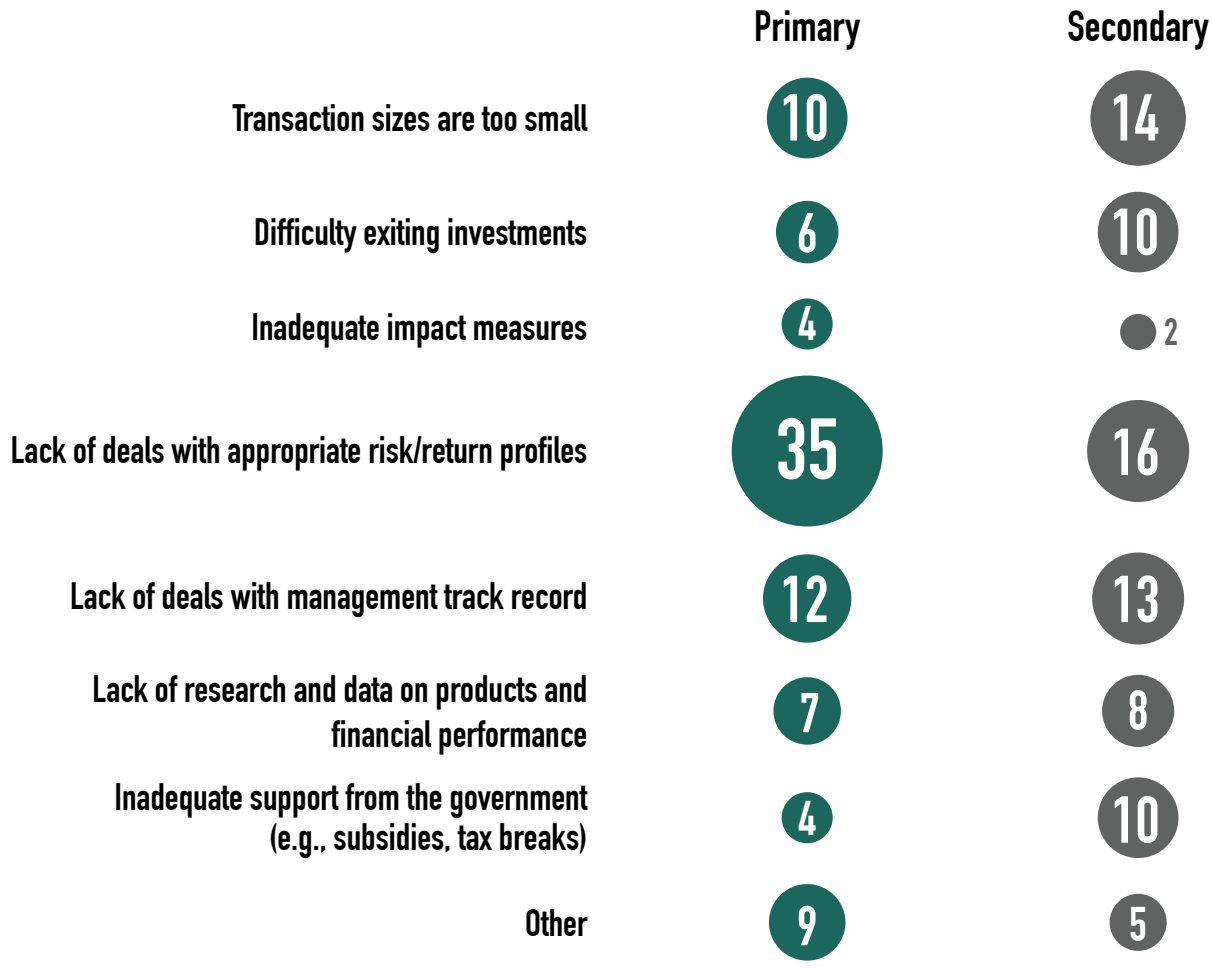
Investors Said Lack of Deals Constrain Growth; More Opportunities with Higher Risk/Return Needed

The clear majority of respondents noted lack of deals with appropriate risk/return profiles as the main challenge to growth in conservation investments (Figure 41). Following that, most organizations listed a lack of deals with a management track record as the primary constraint, and nearly as many pointed to small transaction sizes as similarly limiting.

In terms of secondary concerns, most pointed to small transaction sizes, closely followed by the lack of a management track record, lack of an appropriate risk/return profile, and inadequate government support. The latter should be interesting to policy makers concerned with incentivizing and securing greater private investment in conservation.

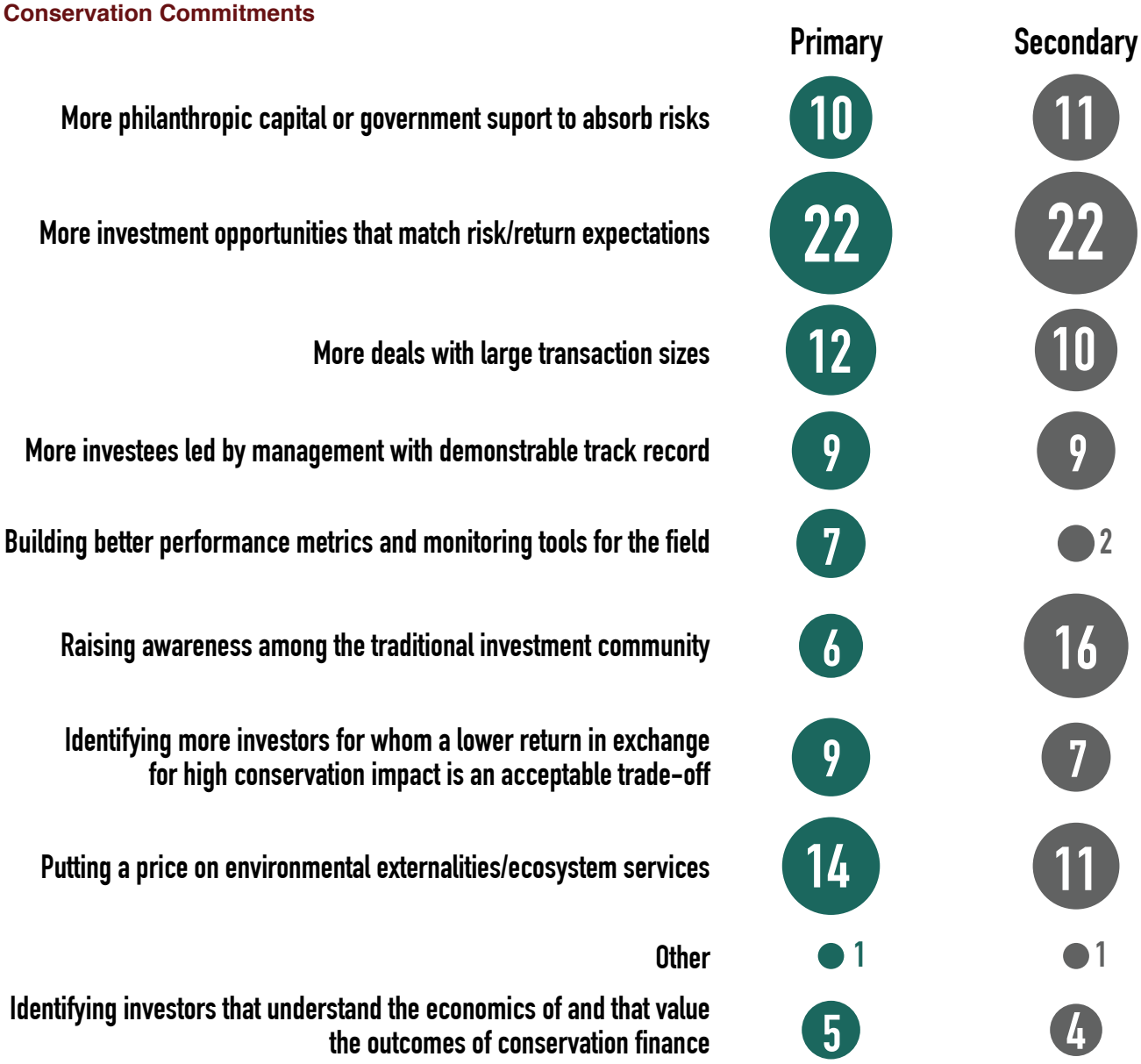
While some respondents consider themselves to be mainstream (not impact) investors and while there has been some buy-in from pension funds and others into conservation funds (see Case Study 2), challenges still remain to appeal to more mainstream investors. One reason may be that, as mentioned above, lack of investments with appropriate risk/return profiles was listed as the top reason across both primary and secondary answers (Figure 42). Many investors also pointed to the need to mainstream these investments through putting a price on environmental externalities and raising awareness of conservation investing among the traditional investment community.

Figure 41: Perceived Challenges to Growth of Conservation Impact Investment Industry



Note: Based on 87 organizations reporting on perceived challenges to the growth of the conservation investment industry.

Figure 42: Perceived Conditions Needed to Increase Capital from Institutional Investors towards Conservation Commitments



Note: Based on 96 organizations reporting on perceived conditions needed to increase institutional investor commitments in conservation.

Conclusion

When the Ecosystem Investment Partners (EIP) set out to raise equity capital for its third "Fund III," it raised almost double the amount ($303M) in less than half the time it took to raise their "Fund II"—*and* the fund managed to secure investments from a pension fund and other institutional investors. This success for a habitat restoration and mitigation banking fund would have been unheard of a decade ago, but it is now becoming more commonplace as investors familiarize themselves with and implement conservation investments.

This report's findings show that there is accelerating demand for conservation investments that generate a return while having a positive impact on our natural infrastructure, as the $8.2B private investment headline illustrates. But there also remains a shortage of investments that meet criteria for both environmental and financial returns, as evidenced by the fact that $3.1B of additional investments stayed on the table last year.

The report findings indicate that direct private investment in sustainable forestry and agriculture, and in other areas of land use and habitat conservation will continue to grow. The trend of investment in each of these sectors has, with only a couple exceptions, grown annually since 2004 (when this and the previous study began tracking investment in conservation).

Importantly, survey respondents reported that their expected rates of return associated with the majority of these investments were in the 5–9.9% range, with greater-risk investments such as wetland banking pushing up into the 10–20% range and higher. While these are reported as *expected* returns and the survey lacks data on exited investments, this finding suggests that investments made to achieve a conservation impact do not sacrifice a reasonable financial return.

Global pressures may hasten the rate and scale of private investment in conservation. Countries under pressure to meet their new climate goals, funders concerned with advancing progress toward climate and sustainable development goals, and companies making pledges for low- and zero-deforestation commodities may all contribute to the opening up of a range of new private investment opportunities involving forests and land use.

For example, IKEA has always been a progressive and innovative company—among other things, it is owned by its own charitable foundation. But that's not why it put millions of dollars into acquiring sustainably managed forest lands last year. The company's leadership made this direct investment to secure long-term, sustainable supplies of its most critical commodity, forest products.

All three areas of private investment tracked in this study have proven viable when conditions are in place, such as appropriate government participation in the form of direct investment or maintaining the proper regulatory environment needed for a consistent and efficient market. Interestingly, while investors are moving into sustainable forestry, they are less quick to move into the supplemental area of forest carbon offsets. This could be attributed to a lack of clear demand for forest carbon offsets by voluntary buyers, but may shift as more government-mandated compliance carbon markets come on line.

If one finding of this study stands out, it is the range of important roles played by government and the need for government to continue playing a proactive role in creating the conditions needed to facilitate proper markets and create favorable conditions for investment. Creation of the jurisdictional programs needed for sustainable commodity trading should enable greater investment in sustainable forest and agricultural practices. Developing the policies and frameworks needed for markets such as forest carbon or habitat banking will spur new investment in forest and habitat mitigation. Government efforts to shift to green infrastructure should enable greater private investment in natural water supply.

Looking ahead—and with vast swathes of forests, habitat, and watersheds around the world under pressure for conversion and cultivation—it is critical that private conservation impact investment grow to a level that will significantly contribute to the protection of earth's forest, water, and biodiversity resources. The findings of this report offer new and encouraging evidence that private capital is beginning to move in this direction.

Appendix: Glossary

General Terms

Capital committed: Capital that has already been allocated to or deployed into specific investments.

Conservation investment: Investments intended to return principal or generate profit while also resulting in a positive impact on natural resources and ecosystems. In addition, conservation impacts must be the intended motivation for making the investment; they cannot be simply a by-product of an investment made solely for financial return.

Development finance institution: Financial institutions that provide finance to governments and the private sector for investments promoting development. These institutions focus on developing countries and regions where access to private sector funding is limited. They are usually owned or backed by the governments of one or more developed countries. Examples include: the African Development Bank, the Asia Development Bank, and the Inter-American Development Bank.

Environmental, social, and governance investment screen: Refers to the three main areas of concern that have emerged as central factors in measuring the ethical and ecological impact of an investment in a company or business. It is also a term that is often used interchangeably with socially responsible investing. See below.

Guarantee: A non-cancellable indemnity bond that is backed by an insurer in order to guarantee investors that principal and interest payments will be made. The guarantee provides investors with an additional level of comfort that the investment will be repaid in the event that the securities issuer is not able to fulfill the contractual obligation to make timely payments. It also lowers the cost of financing for issuers because the guarantee typically earns the security a higher credit rating and therefore lower interest rates.

Mission-related investments: These are market rate investments made by foundations and other mission-based organizations to further their philanthropic goals. They are part of a foundation's endowment and have a positive social impact while contributing to the foundation's long-term financial stability and growth.

Not-for-profit investors: For the purpose of this study, this group includes foundations and non-governmental organizations.

Private investors/organizations: Both not-for-profit and for-profit investors that are raising and deploying capital. While these investors may tap some public financing, at least part of the capital committed is through non-public finance sources.

Program-related investments: These are below-market-rate investments made by foundations to support charitable activities that involve the potential return of capital within an established time frame. Program-related investments include financing methods commonly associated with banks or other private investors, such as loans, loan guarantees, linked deposits, and even equity investments in charitable organizations or in commercial ventures for charitable purposes.

Public investors/organizations: This includes governments (at the national, sub-national, and city level) as well as government-initiated organizations (such as development finance institutions or international finance organizations like the World Bank).

Uninvested capital: Capital that is already raised or readily available to make new investments but has not yet been allocated to or committed to specific investments.

Conservation Categories & Sub-categories

Conservation easement or land easement: The most traditional tool for conserving private land in the United States. An easement is a legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect its conservation values. It allows landowners to continue to own and use their land—as long as the use does not violate the conservation terms set out in the easement. It also allows them to sell or pass the land on to heirs.

Habitat conservation: Includes species and habitat protection through direct land ownership or land easements; forest carbon investments; and mitigation banking designed to protect species, wetlands, and other ecosystems.

Mitigation banking: The restoration, creation, enhancement, or preservation of a wetland, stream, or other wildlife habitat area that is undertaken for the purpose of offsetting the anticipated loss of comparable resources due to development.

Reducing Emissions from Deforestation and Forest Degradation (REDD/REDD+): REDD is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. REDD+ goes beyond deforestation and forest degradation and includes the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks.

Sustainable food and fiber production: Includes enterprises in sustainable agriculture, sustainable farmland management, sustainable ranching, sustainable timber production, sustainable aquaculture, and wild fisheries (both marine and freshwater).

Water banking: The practice of forgoing water deliveries during certain periods and "banking" the right to use the forgone water in the future or to sell it to another party. Water banking generally depends on the availability of significant storage capacity to facilitate such transfers.

Water quality and quantity conservation: Includes watershed protection, water conservation, and infrastructure improvement designed to balance human needs with ecosystems, stormwater management, and trading in water quality or quantity credits.

Water quality trading: This refers to an innovative approach to achieving water quality goals more efficiently. Trading is based on the fact that sources in a watershed can face very different costs to control the same pollutant. Trading programs allow facilities facing higher pollution control costs to meet their regulatory obligations by purchasing environmentally equivalent (or superior) pollution reductions from another source at lower cost, thus achieving the same water quality improvement at lower overall cost.

Water rights trading: This refers to the process of buying and selling water access entitlements. The terms of the trade can be either permanent or temporary, depending on the legal status of the water rights. The water rights market is particularly active in water-scarce areas such as the American West and Australia.

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Demonstrating the value of coastal and marine ecosystem services

Communities Initiative

Strengthening local communities' capacity to secure their rights, manage and conserve their forests, and improve their livelihoods

Ecosystem Marketplace

A global platform for transparent information on environmental finance and markets, and payments for ecosystem services

Forest Policy, Trade, and Finance Initiative

Supporting the transformation toward legal and sustainable markets for timber and agricultural commodities

Public-Private Finance Initiative

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