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# Alliances for Green Infrastructure

## State of Watershed Investment 2016

### Overview

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## Forest Trends' Ecosystem Marketplace

1203 19th Street, NW, 4th floor

Washington, DC 20036

[info@ecosystemmarketplace.com](mailto:info@ecosystemmarketplace.com)

[www.ecosystemmarketplace.com](http://www.ecosystemmarketplace.com)

[www.forest-trends.org](http://www.forest-trends.org)

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**Lead Author**

**Genevieve Bennett**

Senior Associate

Ecosystem Marketplace

**Contributing Author**

**Franziska Ruef**

Research Assistant

Ecosystem Marketplace

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# Acknowledgments

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Mapping by Katherine Sever.

Branding, basic layout, and graphic design by Eszter Bodnar, Visilio ([www.visilio.com](http://www.visilio.com)).



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## Foreword

The World Health Organization and the United Nations estimate that almost 800 million people on our planet do not have access to clean water.<sup>1</sup> By 2025, estimates are that nearly 2 billion people will live in areas plagued by water scarcity.<sup>2</sup>

Despite this scenario, water scarcity is a reversible problem, and there are signs of hope. As this 2016 installment of the *State of Watershed Investment* report series shows, record levels of public and private investment in watershed protection and green water projects are spurring a remarkable amount of innovation that is beginning to respond to the critical need for reliable access to water.

Even more promising is the fact these concepts are making their way into high-level policy and decision-making around the world. In California, a ground-breaking new law recognizes that the state's forests and meadows can act as water infrastructure—opening the door to tapping financing tools for built infrastructure to protect and restore watersheds for water supply. In Peru, under a new national law, utilities now must allocate a portion of water tariffs to green infrastructure and nature-based climate adaptation.

The *State of Watershed Investment* report is offered to a range of audiences including water utility and other government policy makers, engineering and construction firms, public and private investors, and other stakeholders working on access to clean, reliable water supply. The report findings show the potential of green infrastructure for sustainable water management and provide both benchmarks and trends for considering future investments in green infrastructure.

This 2016 report expands upon past studies of water markets and payment mechanisms, and takes into account public subsidy payment programs, user-driven watershed investments, water quality credit trading, and environmental water markets. Findings presented in this report cover the full scale of these payments and investments (e.g., \$25 billion in direct water payments in 2015) as well as the complexity of some of the watershed investment models.

For example, the majority of local water user-driven watershed investments involved communities and business leveraging national or state/province public finance for watershed protection—a partnership model where funding is increasingly available from high levels, but where management decisions are made locally and there is local cost-sharing. Evidence indicates that this emerging trend may be a more sustainable, long-term approach to securing clean water at its source.

Another major finding of the report—particularly relevant in light of the recent election in the United States—is that climate change and risk are on the minds of most water planners. Climate change was identified as a “top three” threat in every single region surveyed last year. By contrast, in 2013 fewer than one in five respondents said that climate change was a factor in program design or decision-making.

The trends documented in this report clearly point to a future in which scaled investments in green infrastructure will continue to grow in importance in addressing not just water scarcity, but also climate resilience, food security, sustainable economies, vibrant cities, and basic human health.



Michael Jenkins  
Founding President and CEO  
Forest Trends

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<sup>1</sup> See <http://www.unwater.org/water-cooperation-2013/water-cooperation/facts-and-figures/en/>.

<sup>2</sup> See <http://www.un.org/waterforlifedecade/scarcity.shtml>.



# State of Watershed Investment in 2016: An Introduction

Ensuring water supply and sanitation is a job nearly as old as civilization. Archaeological excavations have found ancient sewage systems in Pakistan and India dating to 2500 BC. Aqueducts built by the Romans still crisscross Europe and are even, in a few cases, still in use. In the highlands of Peru, pre-Incan stone canals called *amunas* to this day help store rainy-season downpours for dry months.

In 2016, it is an interesting time to be a water service provider. The Earth's population in the last fifty years has moved *en masse* to cities. Climate change threatens to disrupt existing water supply and sanitation systems, and complicate future planning. Economic crises have followed one after another since this century began, hollowing out public budgets for much-needed improvements and upgrades to water infrastructure systems.

At the same time, the last decade and a half have been marked by a growing realization among water service providers (along with policy makers and many in the business community) that nature is not merely “nice to have.” Healthy ecosystems are a critical asset in ensuring that everyone on the planet has access to clean, safe water, and sanitation in this century, and in helping nations to both moderate and successfully adapt to climate change effects.

The goal of this report is to capture the size, scale, and scope of market mechanisms for green infrastructure for water. The diversity and often local scale of such watershed investments sometimes obscures their true impact: while there is no unified market for transactions for watershed protection (in contrast, for example, to a compliance carbon market), the value of these transactions is an order of magnitude larger, reaching nearly \$25 billion (B)<sup>3</sup> in 2015. As global leaders struggle to meet the challenge of minimizing and adapting to climate change while lifting 1.2B people out of extreme poverty in this century,<sup>4</sup> the programs tracked in this report offer critical lessons for addressing water risk in a sustainable, cost-effective, landscape-scale manner.

In this report, we use the term “watershed investment” in the sense of a long-term investment in an asset, just as a city would “invest” in upgrades to its waste water treatment plant (Box 1). Watershed investments may provide financial returns to the parties funding them, but more often the benefits come in the form of cleaner or more reliable water supplies, cost-savings (for example, for water service providers), or even co-benefits like increased incomes for farmers participating in a watershed investment program.

## Box 1: What Are Watershed Investments?

This report defines a watershed investment as any transaction between a buyer and a seller where financial value is exchanged for activities or outcomes associated with the maintenance, restoration, or enhancement of watershed services or natural areas considered important for watershed services.

We focus on transactions for watershed protection, where financial value is exchanged for activities or outcomes associated with watershed management or restoration. Direct investments in green infrastructure where no transaction between a buyer and a provider of green infrastructure takes place are excluded from this study. For example, a city planting trees along public sidewalks, while certainly a green infrastructure **intervention**, will not be included in this report since no incentive or payment is deployed. If that city paid private property owners to install green roofs or rain gardens, on the other hand, those activities would fall within our tracking.

<sup>3</sup> All monetary values are reported in US dollars (\$) unless otherwise noted.

<sup>4</sup> This is the estimated number of people currently living in “extreme poverty,” defined as living on less than \$1.25 per day. The United Nations Sustainable Development Goal 1.1 aims to “eradicate extreme poverty for all people everywhere” by 2030. See <https://sustainabledevelopment.un.org/sdg1> for more information.

This year's report has a broader scope than previous editions: it expands our tracking to include a comprehensive inventory of public subsidy payments for watershed protection, wherein governments reward landholders for good stewardship rather than commodity production. Public subsidies of this type are the largest and steadily growing source of funding for green infrastructure (\$23.7B in 2015). Our scope also covers a range of innovative mechanisms, including user-driven watershed investments, water quality trading and offsets, and environmental water markets.

We heartily thank the hundreds of individuals who have taken the time to submit data or participate in interviews. Given our broad conceptual and geographic scope, we cannot claim to have a complete global inventory of watershed investment mechanisms, but we believe this report represents the most comprehensive effort to date. We caution readers to understand our reporting methodology and to consider reported numbers as conservative. For more information on our scope and methodology, please see the "Watershed Investments 101" and "Methodology" chapters. For more information on specific programs covered in our survey, please visit our online program inventory at <http://www.watershedconnect.org/programs>.

### Box 2: Key Findings

- **In 2015, governments, water utilities, companies, and communities spent nearly \$25B on payments for green infrastructure for water.** Globally, transactions grew an average of 11.8% per year between 2013 and 2015. A total of 419 programs in 62 countries invested in the natural ability of forests, wetlands, grasslands, and other ecosystems to ensure clean, reliable water supplies for cities and communities, and to combat threats from rapid urban expansion and agricultural pollution.
- **Green infrastructure payments protected, rehabilitated, or created new habitat on more than 486 million (M) hectares (ha) of land** around the world, an area nearly 1.5 times the size of India. These programs paid nearly \$16B to landholders to reward good stewardship.
- **Most of this spending (\$23.7B) came in the form of direct subsidy payments from supranational, national, and state/provincial-level governments to landholders** to protect and restore water-critical landscapes and promote a green economy.
- Meanwhile, **water users themselves — the cities, companies, or water utilities acting on behalf of customers that directly benefit from watershed investments — spent \$657M in 2015 to manage water risks in their basins.** State/provincial and local governments took the lead in 2015 in funding user-driven watershed investments, providing eight out of every ten dollars transacted. On the private sector side, consumer-facing businesses, led by the food and beverage industry, made an estimated \$15.4M in payments in 2015 to manage physical risk and reputation.
- **Funding mostly stayed local:** unlike conservation finance for biodiversity or globe-spanning carbon markets, watershed investments usually remained within the political or watershed boundaries where they originated. Interestingly, companies, not donors, drove the water space's (small) share of non-locally originating, user-driven watershed investment. Programs reported at least \$3.5M in international payments in 2015 following water risk upward along companies' supply chains.
- **Water quality trading and offsets declined in 2015 in many long-standing markets in the United States, Australia, and New Zealand**—but in many areas, this was **a sign of success**, because programs phased out trading as they met their cleanup goals. In other markets, particularly in the US state of Virginia, new growth drove overall global transaction values to nearly \$32M in 2015, as private project developers rushed to meet spiking demand for permanent nutrient offsets.

**Box 2 (continued): Key Findings**

- **Instream buybacks — i.e., the use of traditional water markets in pursuit of environmental flows restoration — slumped globally as the new Australian government dialed back investment in the Murray-Darling Basin** over concerns about conflicts with agricultural water users. In the United States, however, growth of instream buybacks was steady: in 2015, the financial value of buybacks surpassed Australia for the first time, and a shift is underway toward cheaper, more flexible, short-term contracts, resetting the market onto a more sustainable long-term path.
- **One in three programs also reported monitoring and/or evaluating “beyond-water” benefits,** with biodiversity conservation, community benefits, and jobs and training at the top of program administrators’ lists. Public subsidy programs also frequently sought to deliver climate adaptation benefits in rural communities, with high numbers of programs harnessing watershed protection subsidies to help address challenges amplified by a changing climate, such as increased flooding, forest fires, and food insecurity.
- **Measuring, reporting, and verification (MRV) practices are on the rise but with little alignment across programs.** Programs that provided detailed data on buyers said that nine in ten buyers asked for some form of assurance that green infrastructure interventions were implemented and performed as intended. But there is little standardization in the watershed investments world for MRV practices, though some programs tested out third-party standards in 2015 at a limited scale. Instead, programs tend to develop their own MRV protocols, if at all. This complicates broad assessments of green infrastructure’s effectiveness or return on investment (ROI).
- **Programs reported that a key barrier to scale is a “capacity gap,”** a lack of local technical and financial ability to quickly design and implement effective watershed investments on the ground. Hundreds of millions of dollars appear to be waiting in the wings for green infrastructure investments, but program administrators have little time, resources, or capacity to design suitable projects for would-be buyers and investors who require a clear sense of ROI.





## Watershed Investment 101: The Case for Green Infrastructure

This report benchmarks global transactions in 2014–2015 that delivered funding for green infrastructure for water (referred to in this report simply as “green infrastructure”) from buyers who believe that restoring, enhancing, or protecting natural systems is an effective, sustainable, and (often) cost-effective way to ensure clean, reliable water supplies (Box 3).

### Box 3: Benefits of Green Infrastructure for Water Supplies

Healthy landscapes support a complex network of ecosystem services and offer numerous benefits—like plant pollination or flood protection—each with their own unique value to ecology and economies.

Some of these services (like pollination) cannot be replaced with existing technology. In other cases, integrating nature-based and built solutions for water treatment, storage, or delivery can reduce operating costs or prolong the lifespan of built infrastructure. For example, reforestation hillsides can limit sedimentation in a hydropower station's reservoir—protecting the turbines from damage and prolonging the life of the reservoir—and also provide immediate, direct benefits for rural communities nearby in terms of soil retention, reduced flood risk, or enhanced groundwater recharge. These benefits are known as watershed services.

Other examples of watershed services provided by healthy landscapes:

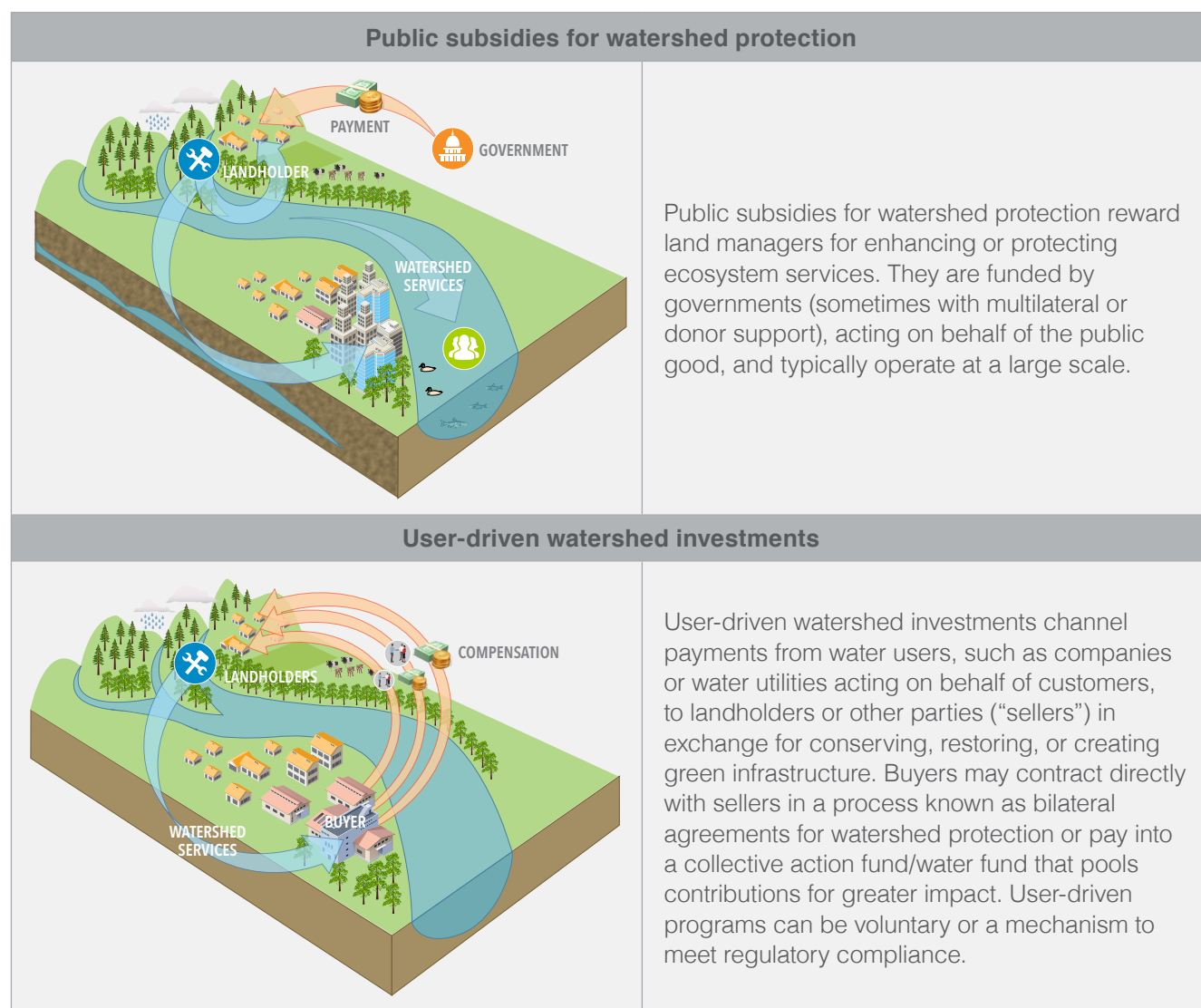
<b>Water for consumptive and non-consumptive human use</b>	Healthy natural systems help ensure clean, reliable water for drinking, agriculture, hydropower generation, navigation, and other uses.
<b>Aquatic productivity</b>	Healthy aquatic habitats and the species that live in them are an important source of food and medicine. Water quality in coastal fisheries, for example, can be strongly affected by the condition of adjacent upstream watersheds. In other words, what happens on the mountain ridges—for better or worse—impacts the reefs.
<b>Flow regulation and storm/flood buffering</b>	Healthy forests, wetlands, grasslands, and mangroves in some cases act as natural “sponges” that absorb water—recharging groundwater supplies, reducing flood risk, and/or maintaining stream flows during dry periods.
<b>Filtration of nutrients and contaminants</b>	Ecosystems, including forests and wetlands, filter pollutants, improving water quality by trapping sediments and pollutants before they enter surface waters.
<b>Erosion control and soil fertility</b>	Healthy forests and grasslands help stabilize soils, preventing erosion and landslides. Natural areas also host critical nutrient cycling, maintaining soil health and productivity.

## Market Mechanisms for Green Infrastructure

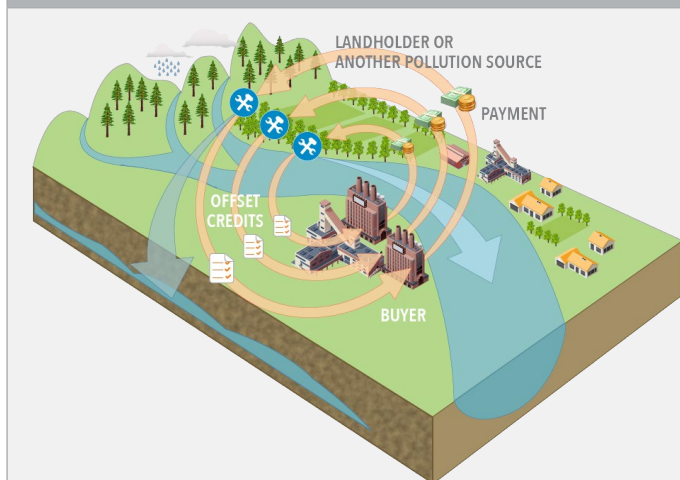
All mechanisms covered in this report originate with a water service provider, government, business, or other party that attaches value to a watershed service, or set of services, and agrees to compensate providers of the service(s) accordingly. For example, a beverage company might be willing to pay local farmers \$100,000 per year to reduce pesticide use, if on-site treatment of polluted water would otherwise cost \$150,000 per year. In this scenario, an individual farmer might be willing to curtail his pesticide use for \$3,000 per year, assuming that this amount would cover his costs to switch to organic methods or otherwise compensate him for foregone income.

This is only one example. In practice, the nature of payments varies according to the buyer's specific goals and the political, social, economic, geographic, and environmental context (Figure 1). Many governments elect to pay subsidies to farmers or other landholders for watershed protection. Meanwhile, one business may decide to partner directly with landholders located near its water source, while another may prefer to contribute to a watershed restoration fund that handles the management decisions. Some program types require fairly sophisticated regulatory frameworks and institutional capacity (such as trading and offsets) or a certain type of property rights regime for water (such as instream buybacks).

**Figure 1: Mechanisms Tracked in This Report**

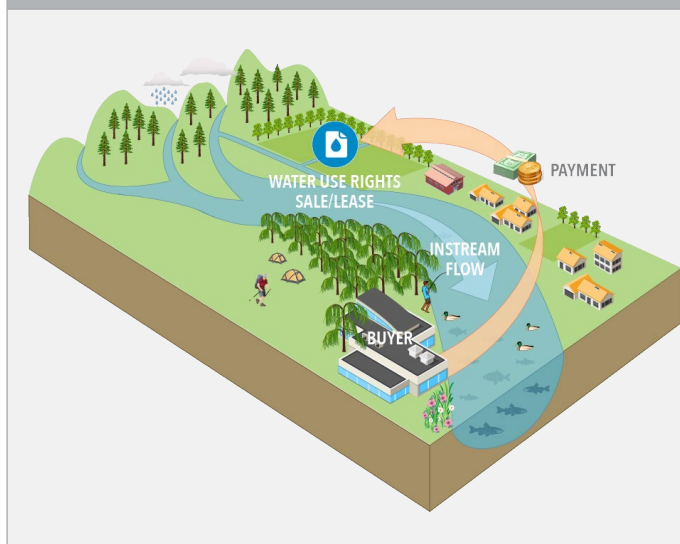


### Water quality trading and offsets



Water quality trading and offsets allow water users to manage their impacts on watersheds by compensating others for offsite activities that improve water quality or supply. Compensatory activities are packaged as a credit or some other unit traded in an established “market,” defined by watershed boundaries. Trading and offsets are often compliance-driven.

### Environmental water markets



Environmental water markets refer to trading of water rights to achieve environmental objectives. This report tracks two primary mechanisms: instream buybacks and groundwater mitigation. Instream buyback programs involve governments or non-governmental organizations that act in the public interest by buying or leasing water use rights. Water rights are not used for consumptive purposes (like agriculture or drinking water) but instead set aside to ensure a minimum level of flows to protect wildlife and habitats. Groundwater mitigation programs are typically compliance-driven and require new users of groundwater in an area to mitigate for their impact, typically through purchasing of offsets.

In contrast to other ecosystem market mechanisms tracked by Ecosystem Marketplace, there is no real “market” for green infrastructure: there is no single established platform where a buyer can go to directly finance interventions that deliver services like aquifer recharge or floodwater storage. There is rarely a market-determined price for watershed services. Even the unit of delivery varies—buyers might pay for hectares of land sustainably managed or pounds of pollution kept out of water bodies.

Hydrological benefits from green infrastructure are also highly localized. Thus, transactions often are local, too. This contrasts with markets for greenhouse gas emissions reductions where transactions and benefits span the globe and are based on the exchange of a clearly defined and universally accepted unit (one tonne of carbon dioxide equivalent). Thus, contracts for green infrastructure services take a multitude of forms.

### Green Infrastructure and Water Systems

However, common to most watershed programs tracked in this report is the recognition that natural systems can complement or substitute for “gray” (i.e., built or “hard”) infrastructure. Forests or wetlands, for example, can filter out water pollution, regulate stream flows, recharge aquifers, and absorb flooding, thus limiting the need for hard infrastructure to perform these functions. For example, a green-gray hybrid infrastructure approach for a coastal city facing flood risks might include the following defenses: wetland restoration on the periphery of urban areas,



bioswales or permeable pavements within the city itself to naturally absorb floodwaters, upgrades to constructed seawalls to buffer surges, and wastewater infrastructure in order to minimize sewer overflows in the event of a flood event.

These green-gray infrastructure hybrids incorporate modern technology and practices from watershed management, low-impact development, and even ancient technologies for treating, storing, and moving water across the landscape (Figure 2). Hybrid and green infrastructure solutions can often be implemented at lower cost and in incremental fashion, delaying large upfront capital costs. Green infrastructure can also improve the functioning of built infrastructure, helping society to fully capture or exceed the expected returns on infrastructure investments. Cities and communities often face complex, interlinked water resource challenges with respect to land use in their surrounding areas. For example, new energy development or growing demand for water-intensive crops such as almonds can conflict with drinking water needs. Watershed-scale approaches can help manage such challenges and trade-offs holistically.

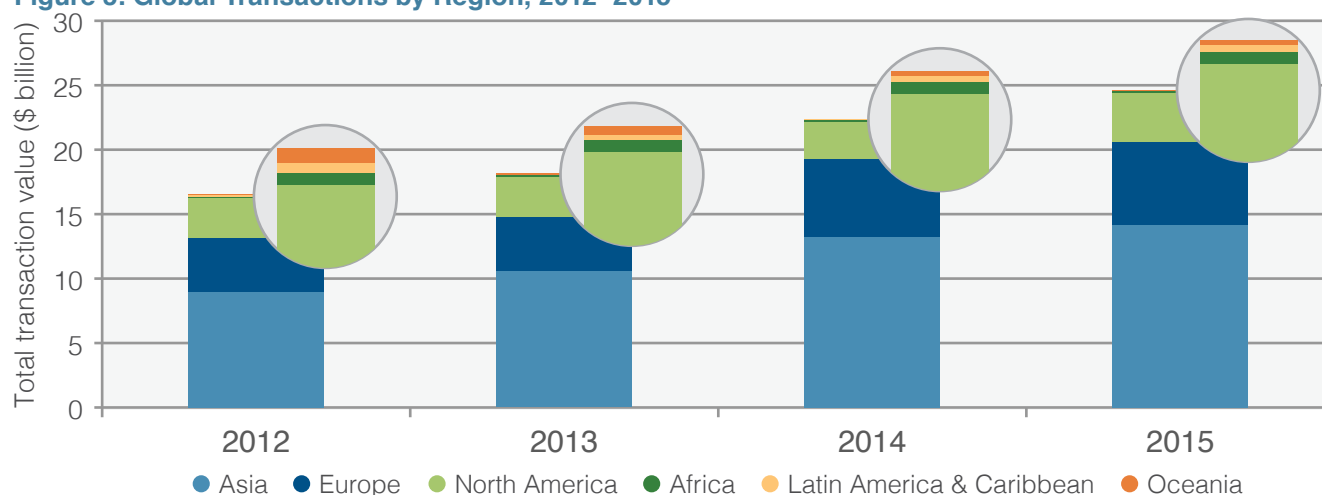
**Figure 2: The Green-Gray Infrastructure Spectrum**



## Nearly \$25B Flowed to 487M Hectares of Green Infrastructure in 2015; Landholders Directly Benefitted to the Tune of Almost \$16B

In 2015, payments to conserve or rehabilitate green infrastructure in our watersheds—the forests, wetlands, grasslands, and other natural systems that filter our water, recharge our aquifers, protect us from floods, and perform a multitude of other hydrological functions—totaled \$24.6B (Figure 3). These funds originated with water users themselves and governments concerned about how the loss of healthy natural systems has led to degraded water supplies and growing risks from fire, drought, and storms.

**Figure 3: Global Transactions by Region, 2012–2015**



These buyers supported 419 programs<sup>1</sup> in 62 countries on at least 487M ha, a land area larger than India (Table 1).<sup>2</sup> One in three programs also reported “beyond-water” benefits, such as biodiversity conservation, support for climate adaptation, and training for local communities in sustainable land management, watershed monitoring, and other skills.

Private landholders were the primary target of payments: in 2015, they earned at least \$9.8B in revenues from these programs, while households or individuals on collectively/customarily owned lands received another \$6B (Figure 4). Another \$7.6B in payments financed protection of public lands.<sup>3</sup> Local tenure patterns and conservation needs drove where payments were ultimately targeted: in Asia, for example, programs mainly engaged communities on collective/customary lands or publicly owned lands, while in Europe and North America most activity focused on payments to private landholders—usually farmers.

<sup>1</sup> This includes 378 fully active and 41 pilot programs. Another 29 programs were determined to be in development but not yet transacting payments. Of the programs tracked in our *State of Watershed Investment 2014* report (Bennett and Carroll 2014), 22 were re-classified as inactive in 2016.

<sup>2</sup> In this report, a *program* refers to the overarching system that facilitates transactions between buyers and sellers, linked by a common administrator and/or market infrastructure (such as an exchange mechanism, crediting protocol, or regulatory framework). A program can encompass many distinct projects. Ecosystem Marketplace primarily collects data for watershed investments at the program level. A *project* is a site, or suite of sites, where restoration, enhancement, or other resource conservation actions are implemented for the purposes of marketing the resulting ecosystem service assets or outcomes to buyers.

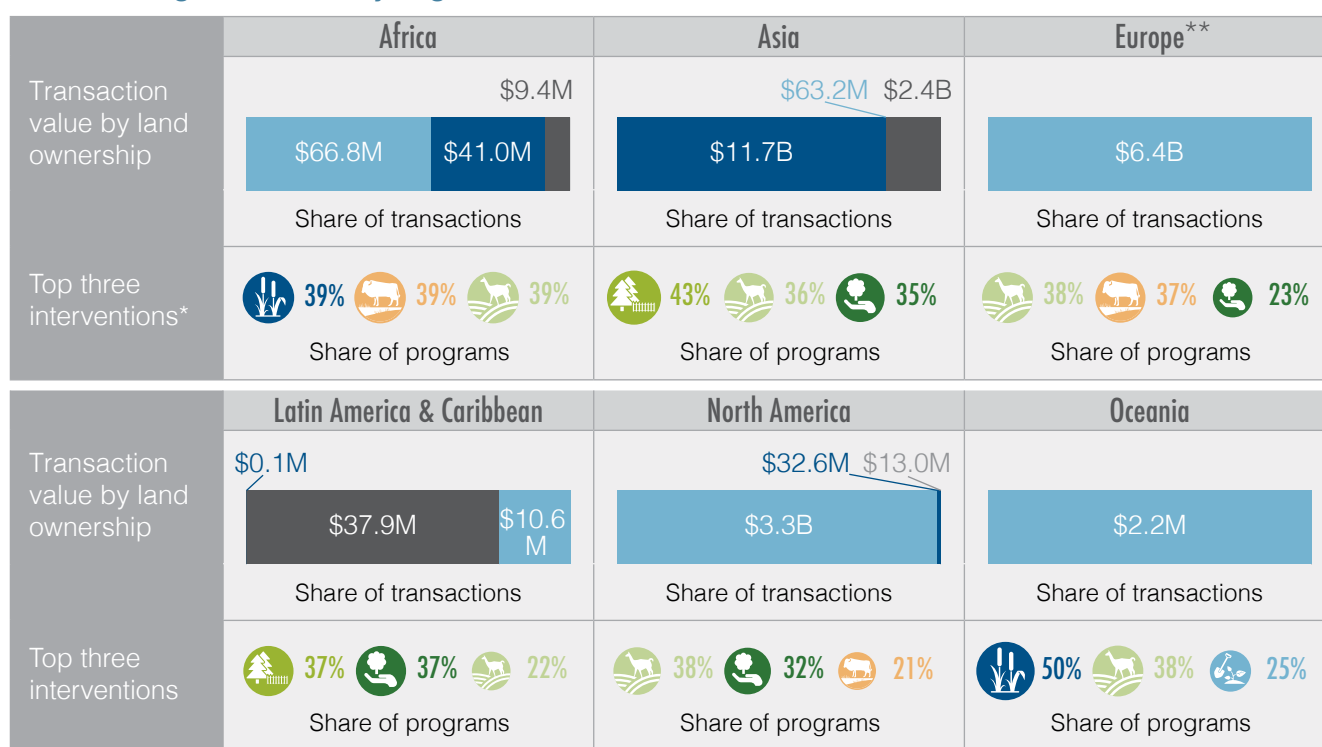
<sup>3</sup> For reported transactions valued at \$1.3B, it is not possible to establish the ownership of lands where watershed protection activities took place. Here, land ownership type was either not reported or programs worked across a mix of lands and did not clearly indicate the relative share of transactions or area associated with each type of land involved.



**Table 1: Global Program Count, Value, and Hectares under Watershed Management in 2015 by Region**

	Africa	Asia	Europe	Latin America & Caribbean	North America	Oceania	Multi-regional programs	Total
Operational programs	16	169	71	47	107	6	3	419
Value in 2015	\$117.8M	\$14.2B	\$6.4B	\$65.9M	\$3.8B	\$52.3M	\$2.6M	\$24.6B
Area in 2015 (ha)	840K	426.6M	47.4M	2.8M	8.9M	26K	135K	486.7M

Notes: Includes only programs transacting payments in 2014–2015 and classified as either “active” or “pilot/demonstration” stage. In this report, Mexico is included in the Latin America and Caribbean region.

**Figure 4: Transaction Value in 2015 by Land Ownership Type and Region; Top Intervention Categories by Share of Programs in 2015 by Region****Land ownership type**

● Public ownership    ● Private ownership    ● Collective/Customary    ● Commercial credit bank

**Interventions**

- Agricultural or pastoral sustainable management
- Forest conservation
- Forest restoration/enhancement
- Forestry/Agroforestry
- Grassland conservation
- New habitat or green infrastructure creation
- Wetland restoration or enhancement
- Riverine/floodplain conservation
- Riverine/floodplain restoration

Notes: “Hectares under management” is a common way to measure activity, but it is not the only one. In Oceania, for example, some programs transact water rights for the environment instead of investing in land-based interventions. That activity is not captured in Figure 4, but is discussed elsewhere in the report.

\*Interventions are reported for total share of programs implementing that intervention by region. Most programs use a mix of interventions—thus percentages for some regions sum to greater than 100%.

\*\*Transaction data for public lands in Europe is not available.

In terms of the interventions being paid for—i.e., the specific activities carried out, such as replanting native tree species or installing fencing along rivers to keep cattle from trampling sensitive areas—sustainable agricultural management and forest conservation/restoration were common points of focus across all regions (Figure 4). Other activities reflected regionally specific ecosystem concerns: in Africa and Oceania, wetland restoration were also in the top three interventions funded, while in Europe and North America, payments were frequently linked to grassland conservation.

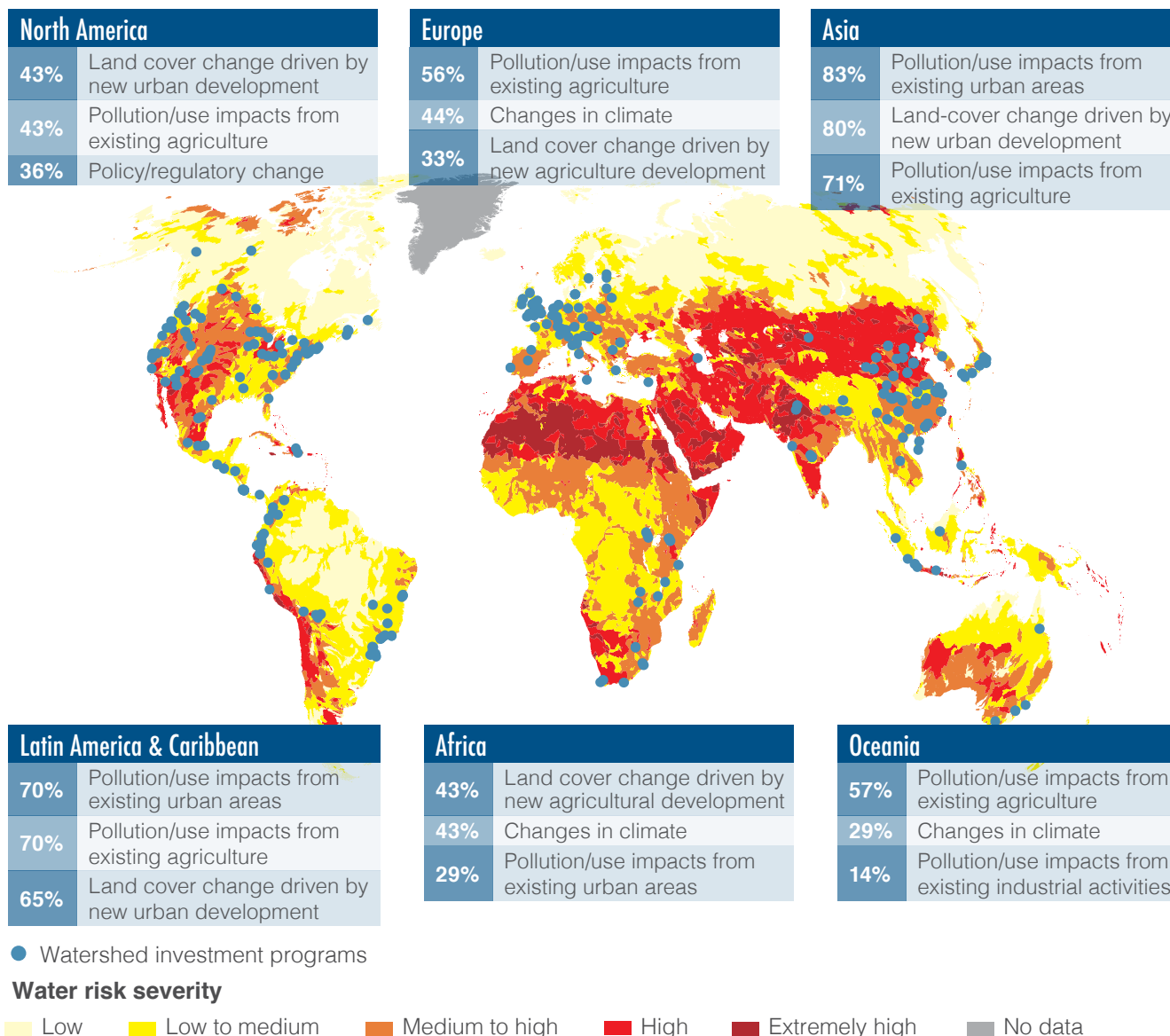




# Agricultural Pollution, Urban Expansion Top Programs' List of Key Threats

Programs responded to a range of threats to water resources in 2015, both natural (floods, droughts) and man-made (industrial pollution, aquifer depletion). An estimated 26% of programs are headquartered in areas already facing “high” or “extremely high” water risk (Map 1).<sup>1</sup> Many watershed investment programs are also working to

**Map 1: Top Drivers of Watershed Investments and Severity of Water Risk by Region in 2015**



Notes: Programs were asked to identify the top three threats facing the watershed(s) where they work. This map displays the three most-frequently reported threats by region. Most programs reported facing more than one threat. Thus percentages sum to greater than 100% for each region.

Source: Gassert et al. 2015.

<sup>1</sup> See Gassert et al. (2015) for an explanation of methodology and water risk indicators.

manage *future* threats to water resources: globally, pressures from urban expansion and the negative impacts of intensive agricultural production are at the top of programs' lists of key water challenges driving their work.

Across the world, programs also reported feeling the effects of climate change: from Australia's ocean acidification; to South Africa's struggles with invasive plants and subsequent increased wildfire risks; to drought in Spain and Portugal; to melting glaciers in Peru's Andean region. The prominence of climate change, which ranked among the top three threats for programs in almost every region, is especially striking given that fewer than one in five survey respondents (18%) for Ecosystem Marketplace's 2014 *State of Watershed Investment* survey said they considered climate change at all in program design or decision-making (Bennett and Carroll 2014).



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The Swiss Agency for Development and Cooperation (SDC) is Switzerland's international cooperation agency within the Federal Department of Foreign Affairs (FDFA). In operating with other federal offices concerned, SDC is responsible for the overall coordination of development activities and cooperation with Eastern Europe, as well as for the humanitarian aid delivered by the Swiss Confederation. The goal of development cooperation is that of reducing poverty. It is meant to foster economic self-reliance and state autonomy, to contribute to the improvement of production conditions, to help in finding solutions to environmental problems, and to provide better access to education and basic healthcare services.

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The John D. and Catherine T. MacArthur Foundation ([www.macfound.org](http://www.macfound.org)) supports creative people and effective institutions committed to building a more just, verdant, and peaceful world. In addition to selecting the MacArthur Fellows, the Foundation works to defend human rights, advance global conservation and security, make cities better places, and understand how technology is affecting children and society. MacArthur is one of the nation's largest independent foundations. Through the support it provides, the Foundation fosters the development of knowledge, nurtures individual creativity, strengthens institutions, helps improve public policy, and provides information to the public, primarily through support for public interest media.



Good Energies Foundation (<http://www.goodenergies.org>) supports sustainable systems that can prevent poverty and disruption caused by climate change in the Global South. Good Energies Foundation was established in 2007 and founded as an integral part of Good Energies Inc., a private equity company specialised in investing in the renewable energy and energy-efficiency industries. Good Energies Foundation's historical mission is the alleviation of future poverty in the Global South by mitigating climate change. Good Energies Foundation initially leveraged its know-how in solar photo-voltaic to provide access to clean energy, especially in the area of rural electrification. At a later stage, climate-change related solutions were added to the portfolio, including sustainable reforestation models. As temperatures rise, we believe that innovative solutions are urgently needed to prevent the future displacement and impoverishment of the world's most vulnerable populations.





## The Family of Forest Trends Initiatives

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### **Biodiversity Initiative**

Promoting development of sound, science-based, and economically sustainable mitigation and no net loss of biodiversity impacts

### **Coastal and Marine Initiative**

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**

Creating mechanisms that increase the amount of public and private capital for practices that reduce emissions from forests, agriculture, and other land uses

### **Water Initiative**

Promoting the use of incentives and market-based instruments to protect and sustainably manage watershed services

Learn more about our programs at [www.forest-trends.org](http://www.forest-trends.org)