## Banks take account of natural capital

Janet Pelley

Businesses that plunder the environment may have a harder time obtaining cheap loans. More than 40 of the world's leading banks are launching a project to incorporate the value of natural capital into their investment risk assessments.

The project springs from last year's Rio+20, the UN Conference on Sustainable Development, during which the participating banks signed the Natural Capital Declaration (NCD), a document stating that natural resource exploitation destroys ecosystem services, thereby threatening financial health. The NCD defines natural capital as the Earth's stocks of soil, air, water, and living things, and the ecosystem services they provide. "Despite being fundamental to our well-being, their daily use remains almost undetected within our economic system", the NCD asserts.

Ignorance of the environmental damage caused by businesses poses an increasing threat to bank portfolios, says Lauren Smart, executive director of Trucost (London, UK), a natural capital consulting firm. For instance, if a company pollutes the water it depends on to make its products, profits will decline and the company may be unable to pay back loans from the bank. A Trucost report estimates that annual global environmental damages will increase from US\$6.6 trillion to US\$28.6 trillion by 2050.

The NCD signatories plan to shine a light on these neglected risks and have recently set up working groups to develop tools that investors can use to integrate natural capital into loans, investments, and insurance policies, according to Liesel Van Ast, NCD project manager (Oxford, UK). The working groups will also develop methods for companies to account for and report on natural capital in quarterly or

annual financial statements. The signatories aim to complete this work by 2020.

Ultimately, the NCD tools will reveal to what degree a company's environmental impact creates a risk for investment or insurance. "This could mean that banks might engage with their clients to help them adopt best practices that don't erode natural capital", Smart suggests. Alternatively, financial institutions might boost the cost of loans or insurance to firms that degrade the environment.

"If banks start paying attention to the impacts of our economy on the environment, that's a very positive development", says Peter Victor, an economist at York University (Toronto, Canada). But such an approach doesn't guarantee that environmental impacts will be reduced below thresholds deemed protective of ecosystem quality, such as lowering atmospheric CO<sub>2</sub> concentrations to below 350 ppm, he cautions.

## Pollution reporting a snap with new app

Alison Gillespie

One of the biggest challenges for those trying to manage or protect rivers has always been identifying pollution problems as they occur – people will sometimes observe illegal dumping, for example, but may not have a way to report it quickly and accurately. Now, a team working in the Shenandoah River and Potomac River watersheds in the eastern US has developed an app to address the problem, enabling anyone with a smartphone to report an incident immediately and – if they prefer – anonymously.

Known as the Water Reporter, the free app auto-tags a user's location and asks for some basic information about the incident; users can also include a photo, if desired. A report is then sent to a local clean-water advocate known as a waterkeeper – which can be either a group or simply an individual – and a live map is



Potomac Riverkeeper Board Member Stanley Oaks uses the app to report pollution in Sleepy Creek.

generated online.

"Usually, if someone has to go through a number of fields on a website form, they aren't too motivated to fill it out", explains John Dawes (Washington, DC), Administrator of the Chesapeake Commons and one of the app's developers. "We wanted to make it as easy as possible to report data."

Brent Walls (Bunker Hill, WV), of the Potomac Riverkeeper organization, says his group has already received 18 reports from the app since it was released in late summer. One even resulted in an official investigation at a leaky industrial impoundment site in his state. "We have big plans", he says about proposed future improvements for the software. "But really, anyone can do this as long as they have a GIS server and they're connected to ESRI [GIS software and geodatabase management supplier]."

Tracy Brown (Ossining, NY), a water-quality advocate with the Hudson Riverkeeper in New York, believes that the new app could be useful and may be something her own group could replicate. "I think it could really help small NGOs to manage the work flow and quality of the data that comes from these kinds of reports", she says. "The public wants to engage on the issue of water quality and this makes it easy for them to do so."