In a judgment announced on February 2nd, the International Court of Justice (ICJ) for the very first time decided a compensation claim for environmental damage. Equally important, it took a close look at whether ecosystem goods and services are compensable under international law. The decision is both carefully considered and deeply frustrating.

There have, of course, been international proceedings in the past addressing the issue of whether and how much to compensate for environmental harms. The famed Trail Smelter arbitrations over eighty years ago addressed the harm suffered by Washington state farmers from pollution emitted by an upwind Canadian smelter. The decision laid the groundwork for the customary law of *sic utere* (liability for transboundary harm). The UN Compensation Commission held hearings on damages to the Kuwaiti environment following the first Gulf War. While recognizing the responsibility to compensate harms to natural resources, neither decisions took an ecosystem services perspective.

We don't tend to think about it, but healthy ecosystems provide a variety of critical benefits. Ecosystem goods are pretty obvious. Forests provide timber; coastal tidelands provide shellfish. While less visible and generally taken for granted, the services underpinning these goods are also important. Created by the interactions of living organisms with their environment, "ecosystem services" provide both the conditions and processes that sustain human life. In addition to logs, for example, forests also provide the services of flood control and carbon sequestration. Tidelands create habitat for shellfish but also provide services of storm surge control.

The fact that ecosystem services are generally valuable should be beyond doubt. Consider how to grow an apple in the wild without pollination, pest control, or soil fertility. With few exceptions, though, ecosystem services have largely been ignored by the law. The focus on ecosystem services did not really start until the late 1990s, well after the creation of our modern environmental law and jurisprudence. But this has been changing. The ICJ decision provides an important example at the international level.

The recent case has the unwieldy name of Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua). It grew out of a series of cases since 2011, challenging Nicaragua's digging canals in Costa Rican territory that had been designated as a Ramsar wetland. The development had degraded 6.2 hectares of wetland and uprooted 300 trees. Nicaragua's liability was no longer in question. The issue was how much compensation they would have to pay as replacement for the lost goods and services.

The Court started by making clear that the "damage to the environment, and the consequent impairment or loss of the ability of the environment to provide goods and

services, is compensable under international law." But what kinds of damages count, and how should their values be assessed?

Costa Rica argued for what it called an "ecosystem services approach." This would incorporate both direct uses of the environment (ecosystem goods) and indirect uses (ecosystem services). Nicaragua, by contrast argued that the proper measure was the replacement cost—how much would need to be paid to preserve an equivalent area. The Court declined to choose between the different methodologies, saying that the valuation method must take into account the specific circumstances and characteristics of each case.

The Court then went through a detailed analysis for 32 paragraphs of the arguments for and against compensation claims filed by Costa Rica for replacement of six specific goods and services—timber, fiber and energy, carbon sequestration and air quality, natural hazard mitigation, soil formation and erosion control, and biodiversity. Together, Costa Rica claimed losses of $2.1 million. Nicaragua placed the harm at no more than $35,000.

To take the illustrative example of wetlands, Costa Rica claimed that the wetlands' services of protection against coastal flooding, saltwater intrusion, and coastal erosion had been harmed. Relying on a series of valuation studies of wetlands from Belize, Thailand and Mexico, Costa Rica argued for a value of $2,949 per hectare. In response, Nicaragua argued that the value of the wetlands' services should depend on the actual threat. Costa Rica had not identified any natural hazards that needed to be mitigated. Moreover, it was improper simply to take the dollar figure calculated for hazard protection provided by coastal mangroves in Thailand and assume it should be equally valid for a wetland in Costa Rica.

After going through a careful point/counter-point analysis of the valuation arguments for each of the six ecosystem services and goods, the Court noted that Nicaragua had also proposed, in the alternative, a "corrected analysis" of $84,000. The Court found that this was too low for a variety of reasons, but did not say how low.

In the end, the Court rejected both parties' valuations for the different services. Rather than calculating the value of each individual ecosystem good and service, it determined instead that it should value the environmental damage from the perspective of the ecosystem as a whole, measuring the harm against a pre-development baseline.

Stating that uncertainty over the extent of damage does not prevent awarding compensation for loss of ecosystem goods and serves, the Court said that it is "reasonable" to adjust Nicaragua's corrected analysis value and announced an award to Costa Rica of $120,000 for the loss of ecosystem goods and services in the impacted area.

At this point, the reader could be forgiven for asking, ***"What?!?"***

For seven pages, the Court had gone through a careful and probing analysis of the dueling valuation methodologies for a range of ecosystem services. It went into significant detail, explaining, for example, why using a 50 year period for damage made sense for some types of services but not for others. At the end, though, the Court threw that all out the window and, without any explanation, declared that a "reasonable" damages amount was $120,000.

With absolutely no discussion of why $120,000 was more reasonable than $1.2 million, it's not clear what to make of this decision going forward. At a minimum, it reinforces that harm to ecosystem goods and services are compensable under international law. And that, in itself, really is significant. Ecosystem services are now firmly established in international jurisprudence as valuable and meriting compensation when harmed.

But guidance for how to go about valuing the proper measure of compensation does not get much beyond a vague nod to being "reasonable." It's better than reading chicken entrails, but not much.

While in a different context, there was a similar kind of debate in the 1980s over how to measure natural resource damages. Superfund and the Exxon Valdez litigation made this a topic of particular importance. Time will tell, but it may be that the recent ICJ decision provides the catalyst to spur a comparable debate at the international level.