



## NEWS FROM OUR PARTNERS

# Necessity Sparks Invention: How COVID is Catalyzing New Approaches to Conservation Monitoring and Technology Adoption

*Carolyn duPont, Upstream Tech  
May 22, 2020*

Let me start with a confession: while my company Upstream Tech provides remote monitoring solutions for the conservation community, the part of our work that energizes me most are opportunities to go out in the field and build relationships with our partners. As I suspect is true of many others in the land trust community right now, I'm grappling with not being able to make those connections, spend that time in nature, and see the impact of all the work we all do beyond the confines of a computer screen. We know that technology can't replace this critical piece of amplifying and connecting with the work we all do.

That said, we have had a unique opportunity at Upstream Tech to engage with a broad range of land trusts in recent months to understand how they're managing field visits, team coordination, and other practices in the context of the COVID crisis.

We developed our [Lens](#) service for remote monitoring of easements and conservation properties using satellite data. The original impetus for Lens was to help land trusts save time and resources through the use of remote monitoring to target or in some cases replace field visits for large, remote, or difficult-to-access properties. We saw that organizations needed an easier way to access high-resolution data for their properties, and to streamline the process of using this imagery for Land Trust Alliance monitoring compliance or internal reporting.

In the context of COVID, our conversations with land trusts have taken on a new level of urgency. Organizations are making plans for how to conduct critical stewardship and monitoring activities on conservation land, while also keeping their own staff and their landowner partners safe and healthy. In many cases, land trusts are adapting, limiting, or seeking alternatives to site visits this year to meet their annual monitoring requirements.

Fortunately, the Land Trust Alliance Standards and Practices - which provides ethical and technical guidelines for US land trusts - already allow for remote property monitoring in four out of every five years, supplemented by on-the-ground monitoring once every five years.<sup>1</sup>

There are a couple of ways that this situation is accelerating how organizations are incorporating remote methods into their monitoring protocols, which we see as linked to broader trends around technology adoption. Land trusts who were already using remote monitoring in some capacity - whether through aerial monitoring via plane, drones, or satellites - are expanding their reliance on these methods.

For instance, The Nature Conservancy's (TNC) California Chapter has been exploring remote monitoring for six years, and in 2019 implemented a statewide remote monitoring program working closely with Upstream Tech and the Lens platform. As the team puts it, "Our plans to share learning and help amplify remote monitoring as a practice throughout TNC were rocketed into action by the COVID-19 crisis in spring of 2020." To date, over 25 TNC state chapters plan to remotely monitor a portion of their portfolio this year using Lens' imagery and monitoring tools.

Their team noted, "Remote monitoring has helped TNC to save resources while still meeting our obligations for easement and preserve monitoring. Having a reliable remote monitoring platform gives our stewardship teams flexibility in how and when they perform monitoring. It enables them to be available for other critical stewardship tasks."

Beyond safe and efficient operation, we are all grappling with the economic uncertainty that this crisis has brought. Significant concerns around fundraising this year as well as endowment health are driving strategic conversations around budgets for the coming year. We're hearing that many land trusts are looking across their organizations to identify places where critical resources can be saved through efficiency, this year and in the years to follow.

As Andrew Moe, Stewardship Program manager at the Minnesota Land Trust and one of our partners, told us recently, "We have continued with on-the-ground monitoring of properties, generally without landowner accompaniment or while strictly adhering to social distancing practices, but we have also converted several ground monitoring visits that staff were scheduled to complete over to remote monitoring using Lens as part of a staff-wide effort to drum up efficiencies given the expected financial impact of COVID to the organization... I anticipate that remote monitoring will make our monitoring program more resilient to unforeseen circumstances, whether it's as minor as a volunteer who drops out due to a move or a global pandemic that upends the world as we know it."

So, what will the implications be for land trusts on the other side of this crisis? From our vantage point, we see a few potential changes that may emerge:

- First, we believe land trusts may move more quickly up the technology adoption curve. Organizations that were thinking about or in the process of transitioning onto new technology platforms may do so more quickly. For many, technology adoption such as for remote monitoring was in the "nice to have" category before -- a way to augment current practices and protocols, but competing with other priorities for time and budget. Organizational leadership and board members seem to be increasingly open to considering technology-based solutions that allow organizations to be effective and resilient in the face of operational challenges.
- Second, efficiency will be an increasing strategic focus, as budgets are uncertain or constrained. Technology platforms will be adopted where they can reduce administrative burden on land trust staff and allow them to focus on the activities where personal engagement and interaction drives the most value. Fundamentally, the question is how to do the same or more conservation work with less -- continuing to support diligent conservation practices and monitoring while protecting land trusts' financial resources.
- And finally, we'll all be thinking through what is the "new normal" - updating policies to be more resilient to disruptions and rethinking the way things have always been done. Several months of working remotely have changed thinking and processes around issues as seemingly mundane as videoconferencing for meetings and digitizing records for easy shared access. With this experience under our belts, some organizations may be better prepared to allow more remote work in the future, which could lead to lasting shifts in how the work of land trusts is done.

At Upstream Tech, we're inspired by the resilience, creativity, and commitment of the global land conservation community right now - and like many of you, we're ready for some fresh air. We have our fingers crossed that everything will be back to normal soon and land trust staff will be able to get out to the field and re-engage with landowners. In the meantime, we're here to support the conservation community however we can as we all navigate the uncertainty and challenges ahead.

*Have news? Share updates from your organization or country by emailing [ilcn@lincolninst.edu](mailto:ilcn@lincolninst.edu)*