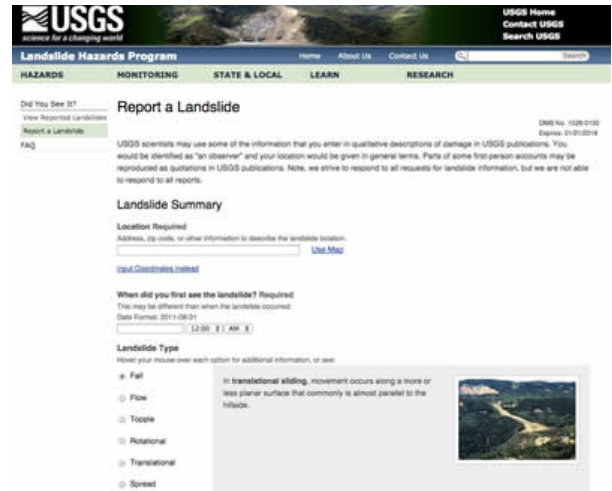


Did You See It?: Crowdsourcing Landslide Information

Case Study Overview

Landslides occur in all 50 states, costing lives and billions of dollars in damage each year. Although no federal agency systematically tracks landslide occurrence, the information is needed to test landslide hazard models and improve our understanding of landslides and their impacts.

In response, the U.S. Geological Survey's Landslide Hazards Program developed *Did You See It?*, an interactive website that people can use to report landslides. Patterned after *Did You Feel It?* (the USGS website for reporting earthquakes), the site collects landslide information from across the United States. It allows ordinary citizens to make observations that can be used to classify landslides and characterize any damage they cause.

The screenshot shows the 'Report a Landslide' form on the USGS website. The header includes the USGS logo and navigation links like 'Home', 'About Us', 'Contact Us', and 'Search USGS'. The main navigation bar has tabs for 'HAZARDS', 'MONITORING', 'STATE & LOCAL', 'LEARN', and 'RESEARCH'. The form itself is titled 'Report a Landslide' and includes a 'Did You See It?' section with links to 'View Reported Landslides' and 'Report a Landslide'. A 'FAQ' link is also present. The 'Landslide Summary' section contains a 'Location Required' field with a 'Use Map' link and a 'Input Coordinates (lat,lon)' link. Below this is a 'When did you first see the landslide?' field with a 'Required' label and a date/time picker. The 'Landslide Type' section has a 'Hover your mouse over each option for additional information, or see:' instruction and a list of options: 'Fall', 'Flow', 'Tumble', 'Rotational', 'Translational', and 'Spread'. A small image of a landslide is shown on the right side of the form.

Project Description

Did You See It? lets citizens report when and where they observed a landslide, and it prompts them to classify the landslide by movement type. Users can also report damage and casualties as well as the landslide's dimensions. In addition, they can make simple geological observations and submit photographs.

Once a user submits a report, the location of the landslide appears on a map, linked to a summary of submitted data. Project staff review any photos submitted before posting them on the website.



Challenges

Obtaining a precise location for a landslide can be a challenge if there is no address for it (common in rural areas) and if the user lacks GPS capability. Moreover, multiple users might submit conflicting data for the same landslide. Getting the word out about *Did You See It?* can be difficult; the project is doing so using social media. Adapting the website for efficient use by mobile devices is yet another challenge.

Benefits and Outcomes

A primary benefit of *Did You See It?* is expanded public awareness of landslides. Interacting with the website encourages users to learn more about the science of landslides.

A primary benefit of *Did You See It?* is expanded public awareness of landslides. Interacting with the website encourages users to learn more about the science of landslides.

The *Did You See It?* project has generated 59 reports of landslides from people across the United States, including three reports in 2015. Thirteen reports were from California, Oregon and Washington, and another 16 were from states east of the Mississippi River. Sixteen reports included photographs of the reported landslides.



Tips

The *Did You See It?* case study illustrates the following steps in the Federal Citizen Science and Crowdsourcing Toolkit:

- **Scope Out Your Problem — Know Your Tools**
Did You See It? shows the public that more information about landslides is needed and that the problem of landslides is not well understood.
- **Build a Community — Know Your Community Partners**
Did You See It? can be used by others, including the emergency response community, state geological surveys and academic partners, to better understand and respond to geologic hazards while raising public awareness about them.
- **Sustain and Improve — Evaluate the Quality of Your Data; Evaluate Your Participants' Engagement**
The management plan for *Did You See It?* provides a process for improving ease of use and the accuracy of information collected.

Learn More

- Website: [Did You See It?](#)
- [Research Paper: Reporting a Landslide](#)
- [Did You Feel It?](#)

Contact Information

Name: Rex Baum
Email: baum@usgs.gov