National Landslide Hazards Reduction Program

Advisory Committee on Landslides (ACL)

June 30th, 2026, 1–5 p.m. EST
Virtual Meeting Minutes

Attendees

ACL Members

- Bill Haneberg, William C. Heneberg, LLC
- Nina Oakley, California Geological Survey
- Lorna Jaramillo Nieves, University of Puerto Rico at Río Piedras
- Leslie Jones, Alaska Division of Geological & Geophysical Surveys
- Bill Burns, Oregon Department of Geology and Mineral Industries
- Josh Roering, University of Oregon
- Casey Hannell, Washington State Department of Natural Resources
- Jennifer Bauer, Appalachia Landslide Consultants, PLLC
- Joe Wartman, University of Washington
- Gabriel Taylor, Washington State Department of Transportation

Agency Representatives

- Jonathan Godt, U.S. Geological Survey (Designated Federal Officer)
- Stephen Slaughter, U.S. Geological Survey
- Kelli Baxstrom, U.S. Geological Survey

Meeting materials, including presentation slides, are available on the Advisory Committee for Landslides website.

1. **Welcome**

Bill Haneberg, Chair of the Advisory Committee on Landslides (ACL, or Advisory Committee), opened the meeting at 1:00 p.m., EST. Nina Oakley, ACL Co-Chair, noted that the scheduled ethics session could not be held due to the absence of available DOI Ethics Staff. The ACL plans to reschedule the ethics refresher for a future meeting. Haneberg and Oakley outlined the meeting's agenda and objectives.

2. **USGS Landslide Hazards Program Updates**

Jonathan Godt, Designated Federal Officer and USGS Program Coordinator for Landslide Hazards, and Stephen Slughter, Associate Program Coordinator for Landslide Hazards, updated the ACL on preliminary interagency reactions to the ACL's recent recommendations report and

provided updates on the USGS-led Cooperative Landslide Hazard Mapping and Assessment Grants Program and National Landslide Hazard Risk Reduction (NLHRR) Working Group.

Godt reported on preliminary report feedback from the Bureau of Land Management (BLM), National Park Service (NPS), National Weather Service (NWS), and the Natural Resource Conservation Service (NRCS), with additional responses and further discussion by the Interagency Coordinating Committee on Landslide Hazards (ICCLH) pending. On Recommendation #1 (*Integrate and further advance a national landslide inventory and impact database using standardized methods*), NPS feedback identified the existing DOT Unstable Slope Management Program (USMP) as a valuable source of data for a National Landslide Hazard and Risk Database, one to which Federal land management agencies already contribute. NPS expressed interest in mechanisms to contribute notes and other information to supplement the standard USMP schema. Also on Recommendation #1, NRCS pointed to their own data collection efforts on unstable soils as an additional source of National Database information. NWS highlighted its extensive partnership with the USGS on landslide hazards and its readiness to contribute meteorological data and technical expertise to advance Recommendations 2 (*Develop a national monitoring and detection framework to integrate multiple data types*) and 4 (*Define the essential elements of a National Landslide Warning System*), along with their recent landslide awareness efforts in the Southeastern U.S.

Discussion

- The ACL observed that data-sharing issues will persist unless agencies coordinate more closely.
- An ACL member noted the value of NPS feedback on integrating varied end-user data collection approaches into a shared system. Others cited experiences of inconsistent inventory data within the Unstable Slopes Management Program, noting challenges accessing landslide data from Federal land managers.
- The ACL noted the need to improve inventory integration under the USMP, though a common index for inventories could help.
- An ACL member suggested the events inventory tied to the USMP could be adapted to support Recommendation 1. Another member noted that the National Institute of Standards and Technology (NIST) is developing a separate standard for recording event impacts and suggested coordination.
- The ACL asked whether the NWS's Southeast partnership was a replicable model or a one-off research effort.

Slaughter provided an update on the USGS-led Cooperative Landslide Mapping and Hazard Assessments Grants Program, now in its third year, with a $1M annual budget, two completed award cycles, and 21 of 41 submitted proposals awarded (average award, ~$99,000). Submission numbers have varied by year (15 in FY24; 26 in FY25; 20 in FY26) and six new states submitted applications in FY26. Most funded projects support landslide mapping and inventory work, with examples cited from Indiana, Vermont, Idaho, and West Virginia. Also with

USGS grant support, the Oregon Department of Geological and Mineral Resources (DOGAMI) produced shareable training videos on lidar-based landslide mapping; the Arizona Geological Survey worked with Tribal partners to produce rockfall hazard maps and conduct landslide outreach for Hopi village residents; the California Geological Survey developed landslide awareness guides; and the Washington Department of Transportation conducted an InSAR study of landslide-prone highway corridors. The USGS recently implemented a process for grants program monitoring and evaluation. Next steps include finalizing FY26 funding decisions, streamlining the Notice of Funding Opportunity (NOFO) process, targeting a regular annual NOFO launch date (FY27 launch planned for November 2026), and expanding the applicant pool.

Discussion

- Members asked about funding stability for the grants program. Slaughter clarified that appropriations that fund the grants are separate from the legislation that authorizes the grants program, and that both appropriations and authorization are needed to ensure grant program stability.
- An ACL member asked if grant project inventories feed into the national inventory. Slaughter explained there is no automated pathway for doing so, but the USGS manually scrapes grant project data for inclusion in the National Database, where appropriate.
- An ACL member highlighted a planned Geological Society of America (GSA) annual meeting session in October 2026 highlighting the accomplishments of USGS landslide grant recipients.

Slaughter also updated the Advisory Committee on the activities of the NLHRR Working Group, a collaborative network of emergency managers, geoscientists, planners, and other landslide hazard and risk professionals facilitated by the USGS Landslide Hazards Program. The USGS stood up the NLHRR in FY25 after broad consultation with state, Tribal, territorial, and local landslide practitioners. The working group, which has met monthly since January 2025, has 225 members across 37 states and 2 U.S. territories. It also supports eight topical and/or regional interest groups initiated, charged, and led by NLHRR members. In FY26, the NLHRR compiled a proceedings document outlining its activities to date; this is currently in review for publication.

Discussion

- ACL members asked whether the NLHRR Working Group is open to the public and how people can join. USGS staff confirmed the working group is open, though targeted to working state, Tribal, territorial, and local professionals.
- An ACL member asked about the Working Group's needs going forward. Slaughter suggested the Working Group could benefit from a steering committee and a more sustainable, possible rotating, facilitator role (currently occupied by a USGS volunteer), along with broader outreach to non-geoscience disciplines.

- Several members acknowledged the challenges of asking busy professionals to take on volunteer tasks like working group leadership or interest group deliverables.
- ACL members suggested outreach targeted to established networks, such as professional social media or listservs. One member suggested that the working group represent organizations, rather than individuals.

3. USGS Perspective on Priority Topics for Future ACL Consideration

To inform Advisory Committee work, Godt identified three broad topics on which the USGS would welcome additional ACL input, focusing on topics responsive to USGS legislative and budgetary direction and aligned with the ACL's own recommendations:

4. The form and function of potential Regional Landslide Observatories, modeled loosely on existing interagency partnerships in the USGS Earthquake and Volcano Hazards Programs, as referenced in National Landslide Preparedness Act reauthorization bill S.B. 1626 and in FY26 appropriations report language requesting cost estimates for such observatories;
5. The value and scope of a potential consensus study on priority science to advance landslide risk reduction, including who would conduct such a study and who would use it; and
6. A survey of Federal grant programs supporting landslide risk reduction, to understand who offers such grants, what users and recipients need from these grants, and to amplify the impacts of various Federal grant programs.

Discussion

- The ACL suggested leveraging town halls at upcoming professional gatherings (e.g., scientific societies, emergency management associations) to gather broad input that could focus Advisory Committee efforts or identify participants for a possible consensus study.
- An ACL member suggested a consensus study could help identify key partners in landslide risk reduction and would be well aligned with ongoing Federally supported research efforts (e.g., the Center for Land Surface Hazards, CLaSH). Godt noted the level of community interest in landslide risk reduction is high and it may be wise to capitalize on that interest.
- An ACL member asked if there is any formal guidance on Regional Landslide Observatories beyond that presented in reauthorization or appropriations language; Godt confirmed no, which is why ACL and broader community input would be valuable in shaping such an effort.
- An ACL member suggested the ACL or its subcommittees could consult subject matter experts outside of the landslide community on schema and databases, noting an inherent tension between schema and data integration. Bringing in different perspectives, particularly those on innovative technology, could inform a

recommendation to expedite data integration across stakeholder groups, in alignment with Recommendation 1.

- On grants, ACL members discussed whether future recommendations could explore additional funding sources, such as philanthropic organizations that have moved into the hazards space. One member noted the scale of philanthropic funding is small and could perhaps serve to supplement Federal grant funding.
- A member suggested ACL recommendations could perhaps be used to focus research community efforts, e.g., by encouraging NSF proposals on high-priority science gaps.
- On Regional Landslide Observatories (RLOs), ACL members discussed the workload burden of duplicating existing collaborative spaces and suggested consolidating community efforts under just one or two coordination structures. Several ACL members suggested an existing academic consortium (CLaSH) as a potential nucleus for RLO discussions.
- An ACL member drew comparisons between RLOs and existing meteorological observatory partnerships, a model the ICCLH could leverage.
- ACL members asked questions about what an RLO would practically look like (e.g., staffing, funding structure) and whether the ACL would decide this. Godt clarified the ACL could advise on what RLOs should looks like; if authorized and appropriated, USGS envisions RLOs would likely have a core of federal staff, potentially combined with state match funding and cooperative agreements with universities or state and local partners. He cited an existing USGS–Puerto Rico cooperative agreement as an example.
- An ACL member cited the Lumberton, North Carolina, Community Resilience Technical Investigation as a possible model for RLOs; this NIST-led, interagency longitudinal study tracked community recovery from catastrophic flooding on an annual basis to capture impacts and inform future preparedness and response efforts. The member noted the study's high cost.

7. Report Drafting Process Discussion

Haneberg and Oakley facilitated a reflection on recent Advisory Committee co-writing activities, followed by discussion of preferred approaches for future report development, including team formation and workflow:

- ACL members praised the in-person, interactive ideation process but suggested that while ideation should happen at an in-person meeting, actual drafting could be handled afterward by a smaller writing team. Final recommendations should then be reviewed by all members before any vote.
- ACL members agreed the subcommittee report's small-group approach to writing worked well, but they felt that more upfront structure—defined focus areas and intended actions for each group—would have produced more concise output.

- ACL members noted the value of separating idea generation from small-group writing and encouraged allowing everyone to think big at first, then prioritize and work towards consensus.
- An ACL member suggested the specific writing mechanism mattered less than having sufficient time to develop ideas fully. Another member noted the final report was produced much faster and was much more distilled than the subcommittee reports and suggested flipping this approach.
- An ACL member suggested waiting to see how current recommendations progress to inform whether future recommendations should be more broadly vs. narrowly focused.
- Members suggested the future idea generating in person meetings conclude with an outline for vote and noted the value of feedback on how the first report's recommendations have played out in practice. Members praised the collaborative subcommittee-writing approach used for recent efforts but felt the final draft in-person had been rushed by comparison and suggested rebalancing timelines going forward. Chairs were thanked for leading the writing process and their emphasis on small-group discussion over written comments alone.
- The Chair reminded members that a) the ACL has independent authority under the National Landslide Preparedness Act to raise topics of its choosing, and b) full-committee deliberations are subject to Federal Advisory Committee Act (FACA) open meeting requirements. This makes it challenging to do large amounts of ideation and writing in person or as a full committee.
- Consensus emerged that the ACL could develop report outlines in person, with writing completed asynchronously by smaller teams in between deliberative meetings. Discussion shifted to selecting near-term topics for ACL consideration and standing up new subcommittees to support that work.
- The group discussed and prioritized potential topics for future ACL consideration: RLOs, a federal grants landscape survey, a consensus study, and advancing/accelerating integration of landslide databases and inventories.
- Several members expressed strong interest in focusing on RLOs as the most actionable near-term topic the ACL could help address. Others raised a "chicken or egg" problem with proceeding before the related reauthorization language is finalized.
- Some members asked for clarity on the intent of reauthorization language describing "regional partnerships" with specific duties attached, which differs from the broader "observatory" concept cited in appropriations report language, which is suggestive of monitoring functions. Godt clarified that partnership-based models like grant and cooperative-agreement structures have a long history in the Landslide Hazards Program and that the ACL is not constrained by current legislative language in shaping its recommendations.
- An ACL member asked whether the Advisory Committee could formally recommend that federal land-management agencies support joint landslide mapping and related data

sharing efforts through grants. Godt indicated this was a reasonable and specific topic for a recommendation, particularly given that landslides originating on federal land often affect adjacent non-federal land.

- ACL members discussed how future RLO-focused work could build on the Committee's four existing recommendations, perhaps serving to focus agency responses to these broader recommendations. Godt noted it is common for advisory committees to continue referencing prior recommendations that have not yet been fully addressed.
- ACL members asked about the status of the now four-year-old National Strategy for Landslide Loss Reduction. Godt indicated it is time for the USGS and ICCLH to start thinking about what's next from a strategic standpoint, noting much of the strategy is evergreen and any updates would be informed by ongoing ACL and interagency feedback.
- ACL members debated whether and how much emphasis on a single topic (e.g., RLOs) would be appropriate across multiple sets of ACL recommendations. One member suggested specific and targeted recommendations would be more actionable; another indicated that RLOs are a substantial enough topic to warrant singular focus for the ACL's next set of recommendations.
- ACL members debated whether RLOs are best understood as risk reduction infrastructure, scientific observation functions, or both, noting needs may vary regionally. Several members pegged the term "observatory" as misleading, implying a physical facility. Godt stressed that establishing new facilities would likely be impractical and pointed to a virtual or partnership-based model, drawing comparison with the Advanced National Seismic System structure built on regional seismic networks.
- Overall, members were supportive of focusing the ACL's near-term efforts on advising on whether and how to implement RLOs. The ACL saw many ways RLOs could advance the overarching landslide risk reduction objectives of the National Landslide Hazard Reduction Program. One member noted that past USGS and Federal partnership with local and regional entities on landslide hazards (e.g., Washington, Oregon, Puerto Rico, Alaska) has helped those entities thrive.
- Given the potential scale and scope of RLOs, the ACL suggested multiple small subcommittees to research and advise on specific components of RLO implementation, with the aim of informing discussion by the full committee, and with the expectation that several other topics of interest to the ACL, like data integration and grants, could be woven into that framing.

8. Next Steps—ACL Work Between Now and November, 2026

Discussion shifted to clarifying subcommittee charges ahead of the ACL's next in person meeting:

- ACL members converged on three topics under the RLO umbrella for subcommittees to explore: 1) collating information on existing natural hazard observatories to consider as models; 2) defining the questions RLOs should address and the outcomes RLOs should achieve to advance National Landslide Hazard Program Implementation; and 3) assessing community needs from RLOs and identifying and evaluating potential RLO partners.
- ACL members self-nominated to serve as subcommittee chairs and members.
- ACL members agreed that each subcommittee would report out on its work to date at the upcoming in-person ACL meeting (15–20 minutes each).
- ACL members briefly discussed additional topics for consideration under the RLO umbrella, such as emerging technologies like NISAR and UAS (flagged as warranting separate treatment); forecasting and warning (to be considered under Topic 2: RLO Outcomes, but relevant to all three subcommittees), and trust-building, community risk management, and landslide losses (to be considered under Topic 3: RLO Partnerships).
- ACL members asked for clarification on external participation in subcommittee activities. Godt confirmed that informal outreach to external colleagues for subcommittee input or one-off external presentations at subcommittee meetings does not require formal appointment. However, formal participation by an external individual on an ACL subcommittee would require consultation with the DFO.
- The Chairs and DFO confirmed the next ACL meeting is scheduled for November 17–18, 2026, in Golden, CO, pending DOI approval.

9. Public Comments

No members of the public registered to speak.

10. Adjournment

The Chairs and DFO thanked the Advisory Committee for their work, and the meeting was adjourned at 5:00 p.m. EST.

We certify that to the best of our knowledge the foregoing minutes are accurate and complete:

- Jonathan Godt, Designated Federal Officer, 10/27/2026
- Nina Oakley, Chair, 10/27/2026