

Department of Natural Resources
Division of Reclamation, Mining, and Safety

Mine Subsidence Protection Program

Performance Audit
May 2025
2456P



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May 30, 2025

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Mine Subsidence Protection Program (Program), within the Department of Natural Resources. The audit was conducted pursuant to Section 2-3-108, C.R.S., which requires the State Auditor to conduct a special audit requested by a member of the General Assembly or the Governor, when approved by a majority vote of the Legislative Audit Committee. The Legislative Audit Committee approved this audit in response to a legislative request, which expressed concerns regarding the Program's claims and appeals process, administrative costs, and the program structure's compliance with applicable federal and state laws. The report presents our conclusions, findings, and recommendations, and the responses of the Department of Natural Resources.

A handwritten signature in black ink that reads "Kerri L. Hunter". The signature is written in a cursive style.



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Report Highlights



Mine Subsidence Protection Program

Division of Reclamation, Mining, and Safety • Department of Natural Resources
Performance Audit • May 2025 • 2456P

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Key Concern

Although the Mine Subsidence Protection Program (Program) is in compliance with applicable laws related to its structure, participation among eligible homeowners is relatively low, few mine subsidence claims are paid, and administrative costs are high in comparison to the benefits the Program provides. Therefore, the Division may have opportunities to increase enrollment while ensuring that the Program is sustainable by reevaluating its operational structure and administrative costs.

Key Findings

- The Program had consistent practices for reviewing claims and substantially followed program rules and management’s intended processes and controls for the Program. However, the Program was not following several program rules, which were last revised in 2002 and no longer reflect its intended practices.
- The Program’s Memorandum of Understanding (MOU) with the U.S. Department of the Interior’s Office of Surface Mining Reclamation and Enforcement (OSMRE), which establishes requirements for the Program’s federal grant, is expired and has not been updated to reflect current program rules and practices.
- Of about 6,300 eligible homes, 861 (14 percent) were enrolled in the Program as of July 2024. Additionally, out of the 45 damage claims the Program received between Fiscal Years 2021 and 2024, it only accepted and paid benefits on 2 claims (4 percent). Most claims were denied due to the Program determining that the reported damage was caused by issues other than mine subsidence. The relatively low participation rate and claim acceptance rate may be due to there being a low risk of mine subsidence in Colorado.
- Program costs have increased in recent years primarily due to increased costs for home inspections, which a program contractor conducts at the time a home is enrolled in the Program and when a participant makes a damage claim.
- The Division of Reclamation, Mining and Safety has not recently evaluated the overall risk of mine subsidence in the state, the market for mine subsidence protection, Program eligibility requirements, and the operational structure of the Program.

Background

- The Program protects eligible Colorado homeowners against the cost of damages to their home caused by coal mine subsidence, which is ground movement resulting from the collapse of underground coal mines.
- To enroll, a home must meet eligibility requirements and undergo an initial inspection. Additionally, homeowners must pay an inspection fee of \$200, and an annual fee of \$35 for the first 3 years their home is enrolled.
- The Program began in 1989 under a grant program run through the federal OSMRE and received a one-time \$3 million grant to establish a trust, which it uses, in addition to interest and homeowner fees, to pay program expenses and claims.

Audit Recommendations Made	Agency Responses		
	Agree	Partially Agree	Disagree
7	7	0	0

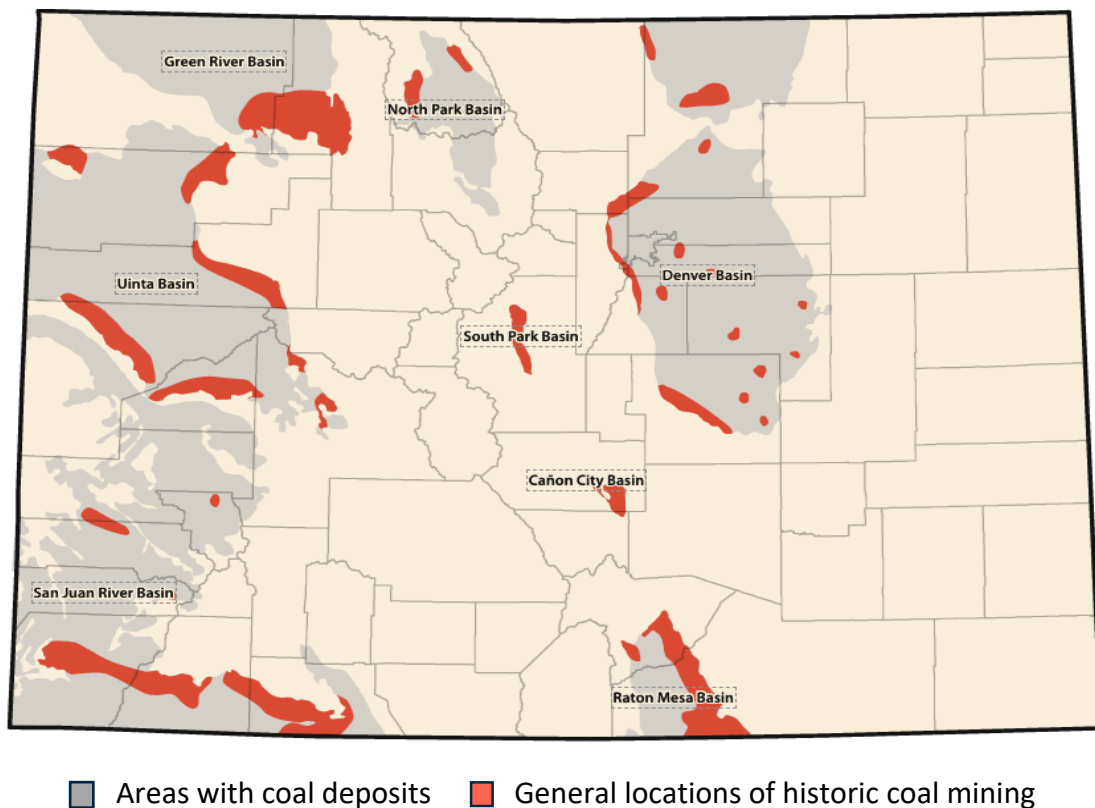


Mine Subsidence Protection Program

The Mine Subsidence Protection Program (Program), within the Department of Natural Resources (Department), protects eligible Colorado homeowners against the cost for damages to their home caused by coal mine subsidence. According to program rules [2 Colorado Code of Regulations (CCR) 407-2, Rule 8.03], “mine subsidence . . . means lateral or vertical ground movement resulting from the collapse of man-made underground coal mines. . .” Examples of subsidence hazards include the potential for sagging ground, sinkholes, and the collapse of mine shafts. These conditions can cause damage to structures, pavement, and utility lines, and in some cases, can pose a safety hazard. Exhibit 1 shows areas of the state where coal mining has occurred, creating a risk of mine subsidence. Program data indicate that there are about 6,325 homes in the state that are built above coal mines and that qualify for the Program.

Exhibit 1

Colorado Coal Deposits and Areas with Coal Mining



Source: Colorado Division of Reclamation, Mining, and Safety and the Colorado Geological Survey 2009 Informational Report, Subsidence Above Inactive Coal Mines: Information for the Homeowner

Administration

Board. Section 34-33-133.5, C.R.S., establishes the Program and authorizes the Mined Land Reclamation Board (Board) at the Department to promulgate rules for the Program. In addition to rulemaking, the Board is also responsible for hearing appeals from program participants who appeal program decisions to deny damage claims or program participation. The Board consists of seven members; one member is the Department Executive Director or their delegate, one member is from the State Conservation Board, and the other five board members are volunteers with specific backgrounds in mining, conservation, and agriculture. The volunteer board members are appointed by the Governor and approved by the Senate for 4-year terms.

Division. The Board has delegated the Program's day-to-day administration to the Department's Division of Reclamation, Mining, and Safety (Division). Program rules [2 CCR 407-2 Rule 8 Appendix A] stipulate that the Program will be implemented by a "Plan Administrator." One Division employee serves as the Program's Plan Administrator for about half of their time, 55 percent of one full-time equivalent employee (FTE). The Plan Administrator handles all aspects of the Program, including enrolling and communicating with participants, promoting the Program, and reviewing and making decisions on damage claims. The Plan Administrator also oversees a contract with a professional geotechnical engineering firm (engineering firm) that conducts initial inspections of eligible properties when homeowners apply to participate in the Program and investigates claims to determine if reported damage was caused by mine subsidence.

Program Participation and Benefits

According to 2 CCR 407-2 Rule 8.02.1, to be eligible to participate in the Program, a homeowner's structure must be:

- A privately-owned residential structure of 1 to 10 units,
- Constructed on or before February 1989, or after February 1989 in an area where maps available at the time of construction did not show that coal mining had occurred (with Board approval), and
- Built on lands that were mined for coal or that were affected by such mining, and abandoned by the mining company or left in an inadequate reclamation status prior to August 3, 1977, and for which there is no continuing reclamation responsibility under state or federal laws.

To participate in the Program, homeowners must (1) pay a \$200 inspection fee to have their residential structures and surrounding land area inspected and photographed by the Program's engineering firm, (2) certify that there is no pre-existing damage to the home, and then (3) pay an annual administrative fee of \$35 for the first 3 consecutive years they are enrolled, or \$105 total. After the first 3 years, participants do not pay additional fees but generally remain in the Program

for the duration of their ownership of the home. When participants sell an enrolled home, enrollment can transfer to the new owner without another inspection, but the new owner must pay the \$35 annual administrative fee for 3 years.

If a suspected mine subsidence event causes damage to a participating property, the homeowner must file a claim with the Program to receive benefits. When a participating homeowner files a claim, the Plan Administrator forwards it to the engineering firm to evaluate the damage and determine whether it is related to a mine subsidence event or whether something else is causing the damage. Under program rules, the damage must be caused by mine subsidence; damage caused by soil expansion, erosion, or improper construction is not covered. As part of its investigation, the engineering firm performs an analysis of maps, historical information, and geological surveys, and conducts an on-site inspection. The engineering firm then submits its evaluation report to the Plan Administrator who makes a determination to approve or deny the claim after reviewing the geotechnical report and considering the evidence. If the Plan Administrator approves the claim, the homeowner is responsible for obtaining three quotes from contractors to repair the damage and submitting the quotes to the Plan Administrator. Taking into account cost and any homeowner concerns, the Plan Administrator selects a contractor to complete the repairs and pays the contractor directly. Alternatively, the Plan Administrator may reimburse the homeowner if they already paid for repairs prior to the claim and the Plan Administrator concludes the cause of the damage was mine subsidence. Under program rules, participants are eligible for up to \$100,000 per occurrence, less a \$1,000 deductible, or a maximum cumulative benefit from all occurrences/claims equivalent to the fair market value of the home prior to the subsidence. If the Plan Administrator denies a claim, the homeowners have the option to appeal the decision, in which case, the Plan Administrator may request that the engineering firm perform additional investigation and reconsider the decision. If not satisfied with the Division's final decision, homeowners can appeal the decision to the Board.

Funding

The Program is funded by a federal grant established under the Surface Mining Control and Reclamation Act and administered by the U.S. Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE). In 1989, OSMRE provided a one-time \$3 million grant to the State to operate the Program, which was used to create the Colorado Coal Mine Subsidence Trust Fund (Trust), established under Section 34-33-133.5, C.R.S. Program costs, including claims payments, inspections, staff salaries, and other administrative costs, are paid from the Trust. Additionally, program revenues, which include fees paid by participants and interest earned on the Trust, are deposited into the Trust to pay for program costs. As of the end of Fiscal Year 2024, the trust balance was about \$4.7 million. We cover program revenues and expenses and the trust balance in more detail in Finding 2 of this report.

Audit Purpose, Scope, and Methodology

We conducted this performance audit pursuant to Section 2-3-108, C.R.S. which requires the State Auditor to conduct a special audit requested by a member of the General Assembly or the Governor, when approved by a majority vote of the Legislative Audit Committee. The Legislative Audit Committee approved this audit in response to a legislative request, which expressed concerns regarding the Program's claims and appeals process, administrative costs, and the program structure's compliance with applicable federal and state laws. Audit work was performed from September 2024 through May 2025. We appreciate the cooperation and assistance provided by the management and staff of the Department during this audit.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The key objectives of this audit were to assess the effectiveness of the Program's controls over its claims and appeals process, determine whether the Program's structure complies with applicable federal and state laws and its grant agreement with OSMRE, and evaluate the Program's administrative costs and the sustainability of the Trust. Additionally, our objectives included a review of processes used by mine subsidence programs in other states.

To accomplish our audit objectives, we performed the following audit work:

- Reviewed relevant federal and state statutes and rules, and the Department's grant agreement with OSMRE, which establish key program requirements.
- Interviewed the Plan Administrator and program management to understand program operations, key practices for enrolling participants and reviewing claims, and program goals.
- Reviewed a sample of 15 claims filed from Fiscal Years 2021 through 2024 (discussed further in the following paragraph) and related documentation to assess compliance with relevant criteria, program controls over the claims process, and the consistency of program practices.
- Reviewed historic program enrollment and claims data from Calendar Years 1989 through 2024 to assess the Program's long-term trends.
- Reviewed costs for enrollment and claims inspections during Fiscal Years 2021 through 2024, and compared these to program revenue and the trust balance during the same period to gauge the Program's long-term financial sustainability.

- Reviewed the mine subsidence protection programs of five other states (Illinois, Indiana, Kentucky, Ohio, and Pennsylvania) to understand how other states provide property owners with protection against mine subsidence damage.

As discussed, we relied on sampling techniques to support some of our audit work. We selected 15 claims from the 45 total claims filed during Fiscal Years 2021 through 2024 to assess the Program's claims process. Specifically, we relied on sampling techniques as follows:

- We selected 5 claims using a targeted selection approach to include the only 2 accepted claims during our review period, 1 claim that entailed additional claim inspection work beyond the initial claim decision, and the only 2 claims that were formally appealed to the Board.
- We selected 10 additional claims using a non-statistical random sampling approach.

The purpose of this sample was to gain insight into how the Program reviewed, approved, and denied claims.

The results of our sample testing cannot be projected to the entire population. However, the sample results are valid for assessing program controls and confirming our conclusions, and along with the other audit work performed, provide sufficient, reliable evidence for our conclusions, findings, and recommendations.

As required by auditing standards, we planned our audit work to assess the effectiveness of those internal controls that were significant to our audit objectives. Details about the audit work supporting our conclusions and findings—including any deficiencies in internal control that were significant to our audit objectives—are described in the remainder of this report.

A draft of this report was reviewed by the Department. Obtaining the views of responsible officials is an important part of the Office of the State Auditor's (OSA) commitment to ensuring that the report is accurate, complete, and objective. The OSA was solely responsible for determining whether and how to revise the report, if appropriate, based on the Department's comments. The written responses to the recommendations and the related implementation dates were the sole responsibility of the Department.

Finding 1—Program Administration

As discussed, the Division is responsible for the Program's administration, with the Board responsible for promulgating program rules to guide its administration. At the Board's direction, the Program, which began operations in 1989, was initially administered by a contractor, which served as the Plan Administrator from the Program's inception through 2012. However, in 2013, the Board moved administration of the Program within the Division and, since that time, the Program has been administered by Division staff. Additionally, the Program operates under a 1986 federal grant,

overseen by OSMRE, which was amended in 1988 to include a Memorandum of Understanding (MOU). The grant and MOU establish the conditions under which the State must administer the Program and include a Plan of Operations that provides specific operational requirements.

What was the purpose of our audit work and what work was performed?

The purpose of our work was to determine whether the Program complies with applicable federal grant requirements and program rules and whether it has effective controls to consistently process claims and make eligibility decisions. To complete this work, we reviewed the Program's grant requirements, as provided in its grant agreement and MOU with OSMRE, including the MOU's Plan of Operations. We also reviewed program rules and interviewed the Plan Administrator regarding the Program's practices for approving new participants in the Program, processing claims, issuing claim decisions, hearing appeals, and maintaining program documentation. We also reviewed a judgmental sample of 15 claims submitted to and reviewed by the Program during Fiscal Years 2021 through 2024, out of a total of 45 claims participants submitted during this period, to assess whether the Program follows its grant agreement with OSMRE and had consistent practices for reviewing claims and making decisions in accordance with program rules.

What problems did the audit work identify and how were the results of the audit work measured?

Overall, we found that the Program had consistent practices for reviewing claims and substantially followed program rules and practices that Division management and the Plan Administrator told us reflected their current intended processes and controls for the Program. However, we also found that the Division has not complied with all requirements or ensured that its federal grant agreement and program rules remain current and reflect the controls it intends to use for the Program. Although the federal grant agreement and program rules were intended to establish the Program's operational requirements, our review of the Program's processes compared to requirements provided in the grant agreement (including the MOU and Plan of Operations) and program rules indicates that the Division did not update the grant and program rules as it gained experience with the Program and modified its processes. Specifically, we found the following:

The Program's MOU with OSMRE is expired and the Program does not follow several MOU requirements, which appear out of date. Specifically,

- As discussed, as part of its original grant agreement, in 1988 the Division entered into an MOU with OSMRE. The MOU included a detailed Plan of Operations that established the key operating requirements that the Program is expected to follow and provided the Division the authority to use the federal grant funding to establish the Program as a state-owned trust. The MOU indicated that it would expire after a 10-year period, at which time it should be reviewed,

and modified as needed, and a new MOU should be established for additional time periods; or alternatively, the remaining federal funds should be returned to the U.S. government. According to Program and OSMRE management, the MOU was never renewed when it expired in 1998 and the federal funds were not returned. Therefore, the Program has been operating under an expired MOU since 1998. At the time of the audit, the Division reported that it was working to establish a new MOU with OSMRE.

- The Program indicated that it does not use the MOU's Plan of Operations to guide its administration of the Program because it is out of date. Although the Program is, in practice, following many elements of the Plan of Operations, it no longer follows several key requirements. For example, the Plan of Operations indicates that "the cost of initial inspection will be borne by the applicant." However, in 2002, the Board amended program rules to allow for the Program to offset the cost of the initial inspection and the Program now covers almost the entire cost. Additionally, the Plan of Operations sets the maximum benefit that participants can receive for each mine subsidence occurrence at \$50,000; however, program rules now allow up to \$100,000 per occurrence. Further, the Plan of Operations indicates that the Program's claims adjustment process will follow the Mine Subsidence Program Claims Adjustment Manual of Procedures, which, in practice, the Program no longer uses. According to the MOU, the State is allowed to make changes to the Plan of Operations without prior consent from OSMRE, but it must "promptly furnish a copy of each such amendment to OSMRE." According to the Division, it has not amended the Plan of Operations or sent notice of the changes that have been made to the Program to OSMRE.

The Program does not follow all program rules, and in some cases, its practices are not aligned with rules, which have not been amended since 2002. For example,

- According to program rule [2 CCR 407-2, Appendix A 5.07], the Program should provide "periodic reports" to the Board and OSMRE, "showing all receipts and disbursements during the period and assets then held in trust." Although the Plan Administrator prepares quarterly reports on the Program's revenues, expenditures, disbursements, and fund balance, at the time of the audit, these had not been provided to the Board or OSMRE and the Board had not regularly requested or reviewed information about the Program's operations. According to Division management, it plans to begin periodically reporting this information to the Board, and did so in April 2025.
- Program rule [2 CCR 407-02, Rule 8.04.3 and Appendix A 2.02] states that claim payments should be made to the homeowner and countersigned by the Division Director. However, in practice, the Program typically pays contractors who complete repairs once a claim is approved instead of paying the homeowner directly. The Division believes this practice is more efficient for claim payout.
- Program rule [2 CCR 407-02, Rule 8.04.2] states that homeowners aggrieved by a denial may petition the Board for a review of the determination within 30 days of the denial. However, in

practice, the Plan Administrator typically resolves disputes on claims decisions and may authorize the Division's contractor to perform additional testing or investigation when a dispute arises. While this process appears to allow for a more efficient resolution of disputes, it is not provided for in program rules.

- Under program rule [2 CCR 407-2, 8.04.1], homeowners are required to file a claim within 90 days of the subsidence event. In practice, the Program has not been requesting any documentation of the date the subsidence event occurred. According to the Division, due to the characteristics of mine subsidence damage, which can appear slowly, it may not be feasible for a homeowner to confirm the date an event occurred.

Why did these problems occur?

Overall, the issues we found related to the Program's MOU with OSMRE appear to have been caused by a lapse in administrative oversight and the Program's administration being transferred from a contractor to the Division in 2013. Specifically, from the inception of the program through 2012, the Program was administered by a third-party contractor. Division management does not know—and we could not determine—why the contractor did not renew the MOU in 1998 or update the Plan of Operations when program rules and practices changed in 2002. Further, in 2013, when the Board transitioned the Program's administration from the contractor to the Division, these requirements were not communicated to the Plan Administrator, who indicated during our audit that they were unaware that the MOU was expired and that the Plan of Operations needed to be updated. Further, division management and the Plan Administrator indicated that OSMRE does not actively monitor the Program and, prior to our audit, had not requested any information about the Program from the Division in at least 13 years. Therefore, it is not clear what expectations current OSMRE management has for the Program regarding its operations, updates, and reporting.

Additionally, the Division indicated that the last time the Board conducted rulemaking for the Program was in 2002. Since that time, the Division said it has made administration decisions based on what it has considered to be in the best-interest of the Program and its participants. For example, there may have been a designated purpose to the 90-day reporting of a mine subsidence event when the rule was written over 30 years ago, but the Division currently does not see how enforcing this particular rule would benefit the Program. However, the Division has not conducted a review to ensure that current practices align with program rules or requested that the Board change rules to reflect current practices.

Further, we found that the Program lacks any written operational procedures. Although the Plan Administrator handles the day-to-day Program administration and was able to describe their operational process to us in detail, without any written procedures, it may be more difficult for division management to review current practices to ensure that they align with program rules and requirements under the Division's grant with OSMRE. Further, a lack of written procedures may have contributed to the Plan Administrator not being informed of key administrative requirements when the Program transferred from a contractor to the Division.

Why do these problems matter?

Maintaining clear and consistent operational policies helps ensure that a program's controls are aligned with management's objectives and comply with applicable requirements, and helps the program avoid risks. Although it does not appear that the problems we identified during the audit have had a direct impact on the Program's ability to provide mine subsidence coverage to participants, they increase the Program's exposure to unnecessary risks.

First, by not maintaining the Program's MOU with OSMRE, the Division risks operating the Program outside of its authority and could be subject to adverse actions from OSMRE. Specifically, the MOU indicates that within 3 months of the expiration of the MOU, the grant funding will revert back to the U.S. government unless it is further extended. Although OSMRE has not sought such a reversion, operating under an expired MOU could risk the federal government seeking the return of all or a portion of the current Trust. Further, by not updating the MOU's Plan of Operations when changes occur, the Division could risk OSMRE management not being informed of the Program's operations or determining that the State is not in compliance with its grant agreement. Although OSMRE management reported to us that it does not have concerns about the current operation of the Program and expects to enter into a new MOU with the State, keeping the MOU up-to-date helps avoid future risks to the Program.

Second, when practices are not aligned with program rules, there is a risk of confusion between the Board, division management, and the Plan Administrator regarding what the agreed upon program practices are, where the Plan Administrator has room for discretion, and what the public, legislators, and eligible homeowners can expect to happen within the Program. This lack of clarity makes it more difficult for the Board and division management to oversee the Program and ensure that its practices are consistent with their goals. For example, because the Board, which is charged with overseeing the Program, has not received regular updates about the Program's activities and financial situation, it is not clear whether it has been fully informed and able to respond to potential opportunities and risks related to the Program and Trust.

Third, a lack of clear, written policies and procedures creates the risk that the Program will not be administered consistently over time. The Plan Administrator has administered the Program for the last 12 years and has extensive knowledge of the Program's operations. However, because the Program's operational practices are not in writing, there is a risk that if administration of the Program had to change hands, some practices would be lost. For example, the Plan Administrator relies on a database, which was built by the Governor's Office of Information Technology, to store some of the information relevant to the Program, but indicated to the audit team that they maintain a separate spreadsheet to track key program information, including the claims process. If another staff member had to take over the Program without help from the Plan Administrator, it is not clear that they would have adequate information to fully understand where to find key program information. Similarly, the Plan Administrator described to us their process for making decisions on claims, which uses a variety of information gained through experience with the Program; however, this process is not formalized in any written procedure, which could make it difficult for someone

else to take over the Program and maintain consistent operations if the Plan Administrator left the Division.

Recommendation 1

The Department of Natural Resources should ensure that the Mine Subsidence Protection Program's (Program) federal grant agreement and program rules are up-to-date and reflect the controls it intends to use for the Program, and that it complies with program requirements by:

- A. Working with the federal Office of Surface Mining Reclamation and Enforcement to renew the Program's grant and Memorandum of Understanding (MOU). This should include updating the MOU's Plan of Operations to ensure that it aligns with program rules and practices.
- B. Performing a review of program rules to ensure that they align with current practices and working with the Mined Land Reclamation Board to update program rules, as needed.
- C. Establishing written operational procedures for the Program.

Response

Department of Natural Resources

- A. Agree

Implementation Date: December 2025

The Division of Reclamation, Mining, and Safety (DRMS) is currently in discussions with the Office of Surface Mining Reclamation and Enforcement (OSMRE) on how best to update and modify the existing MOU and Plan of Operations to ensure alignment with the Mine Subsidence Protection Program's rules and practices. Significant turnover has occurred at OSMRE following the administration transition, so any implementation date will be subject to federal agency internal processes that are currently undefined. However, OSMRE concurred with the implementation date for Recommendation 1, Part A.

- B. Agree

Implementation Date: June 2026

DRMS will initiate a comparative analysis of current practices and existing program rules to identify areas of inconsistency. Once those areas have been identified, a determination will be made regarding what actions the Mined Land Reclamation Board (MLRB) is required to take to bring current practices into alignment with program rules. Changes proposed by the Division will be subject to MLRB discretion.

C. Agree

Implementation Date: June 2026

DRMS will initiate development of a Standard Operating Procedures document to formalize existing practices and institutional knowledge on Program operations. This process will involve a thorough review of existing formal and informal procedures within the Program, and development of step-by-step process documents to ensure consistency in administration of all aspects of the Program.

Finding 2—Program Structure and Performance

The federal Surface Mining Control and Reclamation Act (Surface Mining Act), while setting out several requirements for states' coal mine subsidence insurance programs, generally grants states significant discretion in how they structure their programs. Because the nature, frequency, and location of coal mine subsidence varies from state-to-state, states that have implemented a mine subsidence program under the federal grant have taken different approaches in structuring their programs. For example, with approval from OSMRE, states can set their own eligibility requirements, fees and premium rates, and coverage limits, and can choose who administers the program (e.g., state agencies, private insurers, state contractors).

When the Division began planning its grant application for the Program in 1985, there was limited information available on the risk of mine subsidence in Colorado. Therefore, in developing its grant agreement and MOU with OSMRE, the Division reviewed available information on mines and commissioned studies on the risk of mine subsidence, the number of homes potentially impacted, and the viability of the potential market for covering homes through commercial insurance policies. Overall, based on these studies, the risk of mine subsidence in the state was considered low, but the cost of individual mine subsidence claims was potentially high and hard to predict. There was not enough information on the occurrence of mine subsidence in the state at that time to reliably estimate the actuarial risk associated with mine subsidence and set insurance rates. Additionally, the potential pool of participants was considered too small to form a viable market for insurance in Colorado and private insurers at the time were not interested in providing mine subsidence insurance. For this reason, Colorado structured its Program as a state-owned trust rather than insurance. Initially, the Program charged annual fees to all participants and required homeowners to pay the entire cost of inspections at the time they enrolled in the Program. In 2002, because the Program had paid few claims, the Board determined that the Program could limit annual fees to the first 3 years that participants are enrolled and cover part of the cost of enrollment inspections while still maintaining the long-term sustainability of the Trust and Program. Additionally, although the Program was initially administered by a private contractor, the Board brought administration within the Division in 2013. Other than these changes, there have been few structural modifications to the Program since 1989 when it began operations.

What was the purpose of our audit work and what work was performed?

The purpose of our work was to determine whether the structure and current operation of the Program as a state-owned trust rather than an insurance program complies with applicable laws and regulations. Additionally, we evaluated whether the Program's structure supports its objectives of providing protection against the risk of mine subsidence to property owners in Colorado, increasing participation, and ensuring the sustainability of the Trust and Program.

We conducted the following work in this area:

- Reviewed applicable requirements related to the Program's structure, including federal and state laws, Program rules, and the Division's grant and MOU with OSMRE.
- Interviewed division management and staff regarding the history of the Program and its current practices, and OSMRE management on its understanding of the Program's structure.
- Reviewed studies conducted early in the Program's history related to the risk of mine subsidence in Colorado, and the potential market for mine subsidence insurance in Colorado.
- Performed an analysis of program data on participation and claims, and financial records showing program revenues, costs, and the trust balance. This included a detailed review of costs related to home inspections.
- Conducted a review of mine subsidence programs in other states, which included contacting program staff in five other states to learn their states' practices for protecting against the risk of mine subsidence.

How were the results of the audit work measured?

According to the Surface Mining Act, OSMRE is authorized to grant funds to states from the federal Abandoned Mine Reclamation Fund for "establishment of self-sustaining, individual State administered programs to insure private property against damages caused by land subsidence resulting from underground coal mining . . ." [30 U.S.C. 1231(c)(1)]. Federal regulations [30 CFR 887.5] provide the following definitions related to the statute:

- "Establishment means either the development of a subsidence insurance program or the administration or operation of a subsidence insurance program."
- "Self-sustaining means maintaining an insurance rate structure which is designed to be actuarially sound . . . Actuarial soundness implies that funds are sufficient to cover expected

losses and expenses including a reasonable allowance for underwriting services and contingencies. Self-sustaining must not preclude the use of funds from other non-Federal sources.”

State statute [Section 34-33-133.5, C.R.S.] provides that the Program “shall provide protection for owners of private residential structures against damages caused by land subsidence from underground coal mines. The program shall be operated in accordance with the provisions of [the Surface Mining Act], as amended, and the rules and regulations promulgated pursuant thereto.”

Although the Program is frequently referred to as “insurance” in federal law and regulation that establish the Program, the term “insurance” for the purposes of the Program is not defined. Additionally, state statute does not specifically refer to the program as “insurance,” although it does indicate that participants would be “insured” against the risk of mine subsidence. Therefore, in assessing whether the Program complies with the federal Surface Mining Act requirement to establish “a subsidence **insurance** program [emphasis added]” we considered Department and OSMRE management’s understanding of this provision as well as the MOU between the Department and OSMRE, which established the structure of the Program. Additionally, we reviewed state statute governing the provision of insurance in Colorado [Section 10-1-102(12), C.R.S.], which defines “insurance” as “a contract whereby one, for consideration, undertakes to indemnify another or to pay a specified or ascertainable amount or benefit upon determinable risk contingencies, and includes annuities.”

In addition to reviewing the Program’s compliance with applicable laws, we measured the extent to which the Program achieves its objective of providing protection against mine subsidence in Colorado based on its current structure. Although Division management has not established quantitative performance goals for the Program, it reported that it would like to see participation in the Program increase in order to cover more of the eligible population. Additionally, management indicated that it monitors costs and revenues in order to maintain an adequate balance in the Trust to ensure the continued sustainability of the Program. Therefore, we measured the Program’s performance by reviewing participation rates, the number of claims received and approved, and the amount of claims paid over the Program’s history. To measure the overall sustainability of the Program and Trust, we reviewed trends in Program costs, revenues, and the trust balance.

What did the audit work identify and why did any problems occur?

Operation of the Program as a State-owned Trust Instead of Insurance

Based on our review of applicable requirements and input from Division and OSMRE management, we determined that the Program’s current structure as a state-owned trust rather than a licensed insurance program, complies with applicable state and federal law. According to Division management, it considers the Program to be a “trust” and not “insurance”

because the Program does not provide a licensed insurance product and is not regulated by the Colorado Division of Insurance. However, the Division indicated that the benefit the Program provides homeowners is similar to insurance since participants pay a fee to receive coverage against the risk of mine subsidence. This understanding is consistent with state statute [Section 10-1-102(12), C.R.S.], which defines insurance as “a contract whereby one, for consideration, undertakes to indemnify another or to pay a specified or ascertainable amount or benefit upon determinable risk contingencies.” Further, although the Department’s 1986 grant agreement with OSMRE indicates that it initially planned to provide mine subsidence coverage through private insurers, the 1988 MOU, which amended the grant agreement, indicates that Colorado would use the grant to establish a state-owned trust fund, rather than an insurance program, to protect private property owners against the risk of coal mine subsidence. Additionally, we contacted current OSMRE management, which reported that its understanding is that, at the time of our audit, the Program continued to operate under the 1988 MOU; that it believed that the current structure as a state-owned trust best suited the needs of Colorado; and that it did not have concerns about the current structure. State statute [Section 34-33-133.5, C.R.S.], also indicates that the Program “shall provide protection” to homeowners, and does not directly indicate that the Program should provide “insurance.” Therefore, it appears that the Department acted within the discretion it was allowed by federal and state law and OSMRE management in structuring the Program as a state-owned trust.

Program Performance Under its Current Operational Structure

Although the Program is in compliance with applicable laws related to its structure, we found that program participation is relatively low, few mine subsidence claims are paid, and program administrative costs are high in comparison to the benefits the Program provides and have risen in recent years. Therefore, the Division may have opportunities to increase enrollment while ensuring that the Trust and Program are sustainable by reevaluating its operational structure and administrative costs.

Program participation has declined in recent years. As of July 2024, the Division had identified 6,325 homes in Colorado that were eligible for the Program. According to the Division, these are all of the homes that meet the Program’s requirement of being residential properties, built over an eligible coal mine on or before February 1989. Of these homes, 861 (about 14 percent) were enrolled in the Program in July 2024. However, program participation appears to have decreased over time; according to program records, 1,074 homes were enrolled in the Program in 1996. Division management reported that it would like to expand enrollment in the Program and it has made efforts over the years to do so. For example, in 2002, the Program reduced the cost to homeowners to participate in the Program by capping the cost of the enrollment inspection for homeowners at \$200 and the Program began covering the remaining inspection costs. Additionally, instead of requiring participants to pay an annual fee for every year they participate, the Program began requiring homeowners to pay the \$35 annual fee for the first 3 years that they participate in the Program, after which homeowners can remain in the Program at no additional cost. Further, in Fiscal Year 2022, the Program sent out informational mailers to all of the homes that were eligible for the Program, but not participating. Based on program data, it appears that this marketing effort

led to an uptick in new enrollments; however, as shown in Exhibit 2, the Program has experienced relatively few new enrollments in recent years.

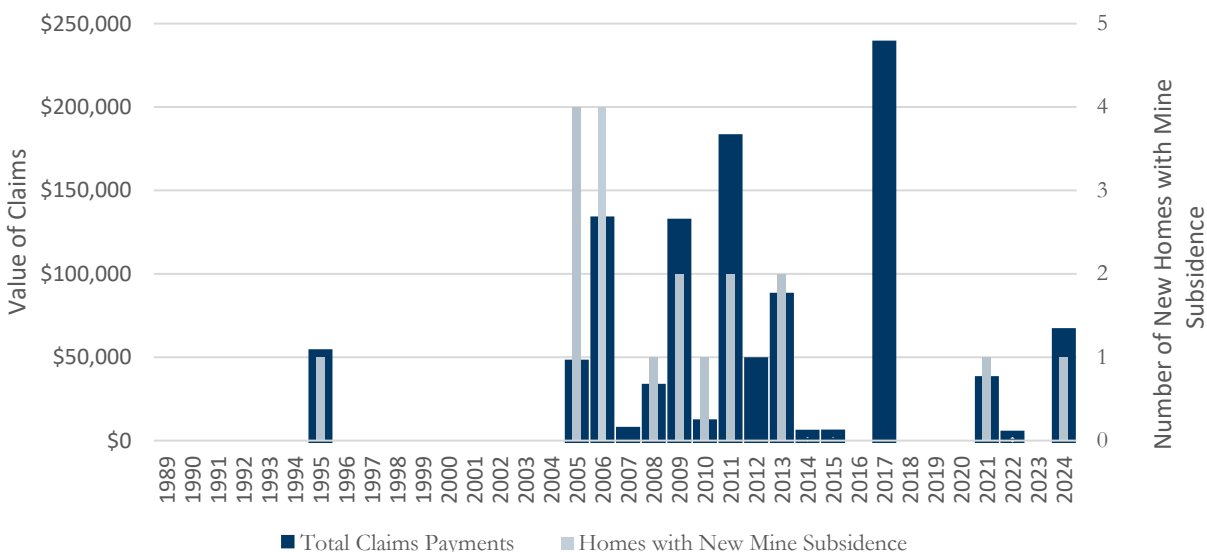
Exhibit 2
New Enrollments in the Mine Subsidence Protection Program
Fiscal Years 2021 through 2024

Fiscal Year	Number of New Enrollments
2021	27
2022	48
2023	18
2024	16

Source: Division of Mining Reclamation and Safety enrollment tracking figures

The Program has paid fewer claims in recent years. Since the start of the Program in 1989, the Division has paid a total of \$1,036,500 for mine subsidence claims at a total of 19 houses. As shown in Exhibit 3, the Program was most active during Calendar Years 2005 through 2013, making only two first-time claim payments at participating houses since 2013. A single house can have multiple claims after mine subsidence is discovered. Although there was a large claim payment in 2017, this was associated with a house that had initially been found to have mine subsidence damage in 2006 and had received multiple repairs covered by the Program in prior years.

Exhibit 3
Total Value of Claims Paid and Total Houses with First Paid Mine Subsidence Claim
Calendar Years 1989 through 2024



Source: Office of the State Auditor analysis of Mine Subsidence Protection Program data.

We also found that the Program denies most claims and has approved a smaller proportion of claims in recent years. Specifically, our review of program data from Calendar Year 2010—the earliest full year for which the Program had maintained the relevant data—through Calendar Year 2024 found that participants filed 128 claims, of which 18 (about 14 percent) were approved and paid. However, the Program has approved fewer claims in recent years, with the Program only approving 2 of the 45 claims (about 4 percent) that it received during Fiscal Years 2021 through 2024. Based on our review of a sample of claims and discussions with the Plan Administrator, in recent years, the Program has denied most claims because the damage reported by the homeowners was found to have been caused by issues other than mine subsidence, such as surface-level soil expansion, construction issues, and poor water drainage around the properties.

It appears that the Program’s relatively low participation and rate of approved claims is due to mine subsidence damage to eligible properties being relatively rare in Colorado; however, the Division has not evaluated the risk of mine subsidence to properties in Colorado to determine if the current risk has declined, assessed the overall market for participation in the Program, or determined whether changes to the Program’s goals and operating structure are warranted given its declining participation and claims acceptance rate in recent years. As discussed, when the Program was in its initial stages, the Department contracted for studies on the overall risk of mine subsidence in Colorado and to identify areas of the state where homes had been built on undermined land. According to these studies, although a few homes were likely to experience mine subsidence damage, the overall number of homes likely to be impacted by mine subsidence in Colorado was relatively low and there existed only a small potential market for coverage against mine subsidence in the state. Additionally, the studies indicated that mine subsidence damage from Colorado coal mines is most likely to occur within 40 years of the mid-life of a mine, which is the time at which the mine is actively producing, with the risk decreasing after this point. Many of the mines in Colorado underneath eligible properties were this age when the Program was established and are now about 80 years old, well past the period when the studies indicated that they posed the greatest risk.

Due to the risk of mine subsidence being low, it is possible that homeowners who are eligible for the Program but not participating are either not aware of the risk of mine subsidence or choose not to participate in the Program because the burdens associated with participating (e.g., paying the fees, undergoing a home inspection) outweigh the perceived risk. We contacted other states (Illinois, Indiana, Kentucky, Ohio and Pennsylvania) with more active mine subsidence programs, and in these states, mine subsidence is a more common risk for homeowners because there are more qualifying homes built on undermined land. Program staff in some of these states indicated that a key driver for participation is public awareness of mine subsidence events that damage property, such as when severe damage to a home is covered by local media. It appears—based on only two homes participating in the Program being newly found to have mine subsidence damage since 2013—that mine subsidence events that damage property are relatively rare in Colorado, which may decrease public awareness.

Program costs have increased in recent years, primarily due to the cost of inspections.

Exhibit 4 provides program costs by category. As shown, total costs increased from \$114,583 in

Fiscal Year 2021 to \$324,731 in Fiscal Year 2024, an increase of about 183 percent, much of which has been due to increases in program spending on inspections.

Exhibit 4
Expenses for Mine Subsidence Protection Program
Fiscal Years 2021 through 2024

Expense Type	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
Inspections	\$114,360	\$158,507	\$213,770	\$273,316
Administration ¹	\$223	\$17,622	\$32,906	\$51,414
Claim Payouts	\$0	\$35,058	\$0	\$0
Marketing ²	\$0	\$15,436	\$0	\$0
Total	\$114,583	\$226,623	\$246,676	\$324,730

Source: Office of the State Auditor analysis of Colorado Operations Resource Engine (CORE) accounting data for the Mine Subsidence Protection Program.

¹Administration costs are primarily the costs for salary and benefits for the 0.55 FTE allocated to the Program. Prior to Fiscal Year 2022, this cost was paid from a separate federal grant, but in Fiscal Year 2022, the Department began paying for this cost using program funds, which caused the increase in these costs.

²Marketing costs in Fiscal Year 2022 were for sending out mailers to eligible homeowners that were not participating.

We found that inspection costs have increased in recent years due to several factors, including increases in the cost of typical enrollment and claims inspections, and costs associated with the Program directing its contractor to conduct more extensive testing in response to participants appealing claims.

The Program directs its contractor to conduct inspections of homes under three circumstances, which include:

- **Enrollment inspections to assess and document the condition of the home at the time of enrollment.** Enrollment inspection reports include a detailed description and classification of observed damage, a summary of the conclusions, a description of historic mining near the home, site maps, mine workings maps, present-day and historic aerial photo maps, and a completed pre-enrollment inspection form.
- **Initial claims inspections** to assess damage reported by a homeowner and determine whether it is caused by mine subsidence. At this stage, the contractor performs a detailed comparison of current damage to any damage documented during the enrollment inspection, inspects the property and surrounding areas for signs of mine subsidence or other conditions that could cause the observed damage, reviews historic records for mines near the home, reviews aerial photos of the property, and concludes on the likelihood that the damage is caused by mine subsidence as opposed to other conditions.

- **Additional claim inspections** to more conclusively determine the cause of damage. For some claims, the Plan Administrator requests that the contractor conduct more extensive inspections and testing to determine the cause of damage. This can occur when the initial inspection is not conclusive and the contractor suggests that additional, more extensive testing be performed or when homeowners dispute the Plan Administrator's initial determination on the claim. Additional investigation methods can include drilling, soil and rock sampling, laboratory testing, core scanning, and other geophysical methods.

As discussed, at the time of the audit, the Division relied on a single engineering firm to conduct inspections for the Program. The Division initially entered into a contract with this firm in 2019. From 2014 through 2018, the Division had contracted with a different contractor to conduct inspections. Since 2014, the Division has conducted a competitive procurement process to select an inspection contractor every 5 years. Because it was seeking an engineering firm, the Division used a request for qualifications process as required by Section 24-30-1401, et seq., C.R.S., in seeking potential contractors, which focused on evaluating the qualifications of the potential contractors to complete the needed work, but did not require the Division to receive pricing bids or select the lowest priced contractor. The Division set its contracts with the engineering firm for 5-year terms and structured the contracts to require annual extensions. Under its current contract, the Division only pays for inspections it directs the engineering firm to conduct, with the firm charging an hourly rate based on the time needed for inspections.

Although we did not perform a detailed review of inspection costs prior to Fiscal Year 2021, program records indicate that in Fiscal Year 2018, under the contract with its previous inspection contractor, the cost of an enrollment inspection was about \$425 and the typical cost of an initial claim inspection was about \$1,400. Our review of inspection costs from Fiscal Years 2021 through 2024 found that the cost of inspections has increased substantially in recent years and is significantly higher under its current inspection contract than what the Program had historically paid. Specifically, the average cost for an enrollment inspection increased to about \$3,500 in Fiscal Year 2024—a 33 percent increase from Fiscal Year 2021 and a more than 720 percent increase from what was paid under the previous inspection contractor up until Fiscal Year 2018. Similarly, the cost of initial claim inspections has increased by about 75 percent from Fiscal Years 2021 to 2024, and by about 300 percent since Fiscal Year 2018, when the Division changed inspection contractors. Exhibit 5 provides inspection costs for Fiscal Years 2021 through 2024.

Exhibit 5
Program Inspection Costs by Inspection Type
Fiscal Years 2021 through 2024

Category	Expense Type	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
Enrollment Inspections	Total Spending on Enrollment Inspections	\$70,692	\$109,050	\$54,826	\$55,794
	Number of Enrollment Inspections	27	48	18	16
	Average Cost per Enrollment Inspection	\$2,618	\$2,272	\$3,046	\$3,487
Initial Claim Inspections	Total Spending on Initial Claim Inspections	\$28,289	\$33,969	\$68,605	\$55,044
	Number of Initial Claim Inspections	9	8	18	10
	Average Cost per Initial Claim Inspection	\$3,143	\$4,246	\$3,811	\$5,504
Additional Claim Inspections	Total Spending on Additional Claim Inspections ¹	\$15,379	\$15,489	\$90,340 ²	\$162,478 ²

Source: Office of the State Auditor review of Mine Subsidence Protection Program data and information from the Colorado Operations Resource Engine (CORE).

¹ Not all claims received inspections beyond the initial inspection and the Division lacked adequate data for us to determine the average cost of additional claim inspections.

² Most of the additional claim inspection costs in Fiscal Years 2023 and 2024 appear to be associated with extensive testing for two claims, which were appealed to the Board. However, the Program lacked data and sufficient records to precisely determine the costs associated with these claims.

According to Division management, inspection costs increased substantially in 2019 when it selected its current engineering firm to perform inspections for the Program. Division management indicated that it selected this contractor because it has additional technical expertise relevant to determining mine subsidence, has access to more sophisticated equipment, and conducts more detailed reviews than were conducted by the Division's prior contractor. More recently, as part of their 2024 contract, the Division requested that the engineering firm begin conducting additional inspections of floor levels during enrollment inspections that added costs to the inspections. Additionally, the Division indicated that inspection costs have risen with inflation, which has been high in recent years, and that it was likely getting a better price with its previous contractor than what would currently be available. Further, Division management reported that the enrollment inspections are an important control to ensure that the Program does not pay for damage that occurred prior to the home enrolling in the Program and only pays for damage caused by mine subsidence. According to the Division, because damage caused by issues other than mine subsidence is relatively common in the areas with eligible properties, if the Program pays damage claims for non-eligible damage, it

could risk the long-term sustainability of the Trust. Management also indicated that more comprehensive inspections, both at the time a home is enrolled in the Program and when claims are filed, better allow the Program to determine whether mine subsidence has occurred.

However, our review of inspection reports, contractor invoices, and the Department's contract with its engineering firm indicate that there could be opportunities for the Program to save costs by re-evaluating its use of contract services for inspections. For example, the engineering firm charges the Program hourly rates between \$130-\$220 based on the expertise and qualifications of its staff, which consists of highly-trained geotechnical engineers, scientists, and other experts. Based on our review of enrollment inspection forms and discussions with the Plan Administrator on the work performed during inspections, it is not clear that these inspections require the level of technical expertise that the contractor's staff possess. For the most part, these inspections consist of documenting the current conditions of the property with a high degree of detail through visual observations and do not appear highly technical. Although the Division reported that having one contractor conduct all of the inspections for the Program allows for better continuity between enrollment inspections and claims inspections in the event a claim is made, it has not reviewed whether it could reduce costs and still adequately meet its needs by employing additional contractors with fewer qualifications to perform less-technical inspections or solicited bids to gauge the cost of such contractors.

Further, inspection costs in Fiscal Years 2023 and 2024 were higher than usual due to two claims (arising at adjacent properties) for which the Division authorized its contractor to perform extensive testing. Although we could not precisely measure all spending associated with these claims, our review indicates that the Division paid its contractor over \$200,000 for inspections and related work associated with these claims. Because the Division does not estimate the cost to repair observed damage prior to its approval of a claim, and the Division denied both of these claims, we could not determine the potential cost of repairs if these claims had been approved. However, spending on these claims far exceeded the amounts paid for the two successful claims the Program has paid since Fiscal Year 2021, which were \$35,000 and \$63,000. Although the Program needs adequate information from inspections to make claims decisions and ensure a fair process for claimants, it should ensure that the amount it spends on inspections is proportionate to the risk the inspections are meant to address. The Division has not established any formal limits for the Program related to inspections costs or guidance for determining how much it should spend on inspections to defend its decision to deny a claim.

Based on our review, it does not appear that the Program is at immediate risk of exhausting its trust balance; however, the issues we found put pressure on the long-term sustainability of the Trust and indicate that the Program may not be providing a benefit that warrants the current administrative expenses. As shown in Exhibit 6, expenditures from the Trust have exceeded revenues during Fiscal Years 2021 through 2024, causing the trust balance to decline.

Exhibit 6
Program Expenses, Revenues, and Year-End Trust Balance
Fiscal Years 2021 through 2024

Category	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
Expenses	\$114,583	\$226,624	\$246,677	\$324,731
Revenues	\$71,768	\$71,689	\$146,308	\$183,960
Ending Balance	\$5,126,926	\$4,971,991	\$4,871,622	\$4,730,851

Source: Office of the State Auditor review of Colorado Operations Resource Engine (CORE) data.

As discussed, inspection costs make up the majority of expenses for the Program—about 83 percent from Fiscal Years 2021 through 2024—with only about 4 percent of expenses going toward approved claims. Program revenues primarily come from interest earned on the Trust, which makes up 92 percent of revenues, with 8 percent coming from fees paid by participants.

The Program’s current cost and revenue structure keeps the cost to program participants low, which supports continued enrollment, but would not be sustainable if program participation increases. For example, the trust balance has decreased by an average of about \$110,000 per year from Fiscal Years 2021 through 2024, and could continue to lose funds at this rate for about 43 years before the Trust would be exhausted. However, if the Program were to increase enrollment from the current 14 percent of the 6,325 eligible homes in the state to 25 percent of eligible homes, which would represent an increase of about 720 homes, the estimated enrollment inspections alone, based on current costs, would cost the Program \$2,520,000, with only about \$220,000 of this cost being offset by fees paid by the new participants. This is because currently the Program spends about \$3,500 on a pre-enrollment inspection for each new participant and only collects \$305 in fees (including both the \$200 inspection fee and the \$35 enrollment fee, which must be paid for 3 years). As discussed, while it is possible that the Program could save costs by reviewing its use of contractors to complete the pre-enrollment inspection, it is likely that the cost to perform enrollment inspections for new participants will continue to exceed the current fees the Program collects. Therefore, in order to achieve its goal of increasing enrollment for the Program, Division management will need to review its current fee structure as well as its costs.

As part of an assessment of the Program, Division management could consider larger structural changes to the Program to increase participation and ensure the sustainability of the Trust and Program. As discussed, the issues we identified indicate that division management needs to assess the current market in Colorado for mine subsidence protection, given the potential for decreasing risk of mine subsidence in the state; review its use of contract inspectors to control costs; and consider changes to its fee structure. However, larger changes to the structure of the Program, such as its eligibility requirements, use of inspections, and the Program’s provision of coverage through a trust rather than through traditional insurance, may be necessary to ensure that the Program is using its available funding to the fullest extent possible towards its objective of providing mine subsidence protection. Under the federal Surface Mining Act, states are provided

with flexibility to structure mine subsidence programs in the way that will best meet their needs. For example, our review of programs in five other states (Illinois, Indiana, Kentucky, Ohio and Pennsylvania) found the following practices that the Department could consider:

- **Participation requirements.** Colorado is the only state to limit program participation based on when the house was built; in other states included in our review, homeowners could still receive coverage even if their home had been built recently. Although division management indicated that this requirement was put in place at the time the Program was established to avoid encouraging future development on undermined land, this requirement reduces the number of homes that can be covered by the Program. Additionally, some states do not restrict coverage to residential properties as is the case in Colorado and allow commercial properties to be covered. At the time of our audit, the Division had not evaluated how many properties would be eligible if these requirements were not in place.
- **Insurance Structure.** In all of the other states we reviewed, mine subsidence coverage is sold to homeowners through private insurance companies and is either required to be included in all homeowners' insurance policies in covered areas or must be offered as an optional add-on to existing insurance policies. In some states, the state acts as a reinsurer for the program, meaning that private insurers sell the policies, but send the premiums they collect from homeowners to the state and the state assumes responsibility for paying claims. Around the time of Colorado's MOU with OSMRE in 1988, and again in 1996, studies commissioned by the Division determined that there were too few potential participants to form a viable market for mine subsidence insurance through private insurers. However, if the Division expanded the number of homes eligible for the Program by changing eligibility requirements, it could again consider whether this would create a large enough potential market to provide mine subsidence coverage through traditional insurance and whether doing so would benefit program participants and the State.
- **Inspections.** Out of the states we reviewed, only Colorado performs mine subsidence-related inspections at the time a home is enrolled in coverage. In other states, because coverage is provided by private insurers, homes may undergo general inspections under broader homeowners' insurance policies, but enrollment inspections specific to mine subsidence are not needed for participation. Based on our research, general home inspections in Colorado typically cost between \$300 to \$700, based on the location and size of the home, compared to the \$3,500 the Program pays, on average, for enrollment inspections specific to mine subsidence. Similar to Colorado, other states conduct claims inspections to determine whether reported damage is caused by mine subsidence, and in some states, insurance companies or the state program will hire a geotechnical contractor to conduct the inspection. However, some states' programs, which have significantly more claims and participants than Colorado, maintain their own staff with geotechnical expertise to conduct inspections in-house.

- **Premiums.** Other states' programs charge annual premiums for the life of the policy, which is different than Colorado where homeowners pay a \$35 annual fee for only the first 3 years of program participation.

Why do these problems matter?

As discussed, when the Program's structure was established under the 1988 MOU, the Division and Board took into consideration studies conducted around that time that looked at the risk of mine subsidence in the state, the number of potential homes at risk, and the market for mine subsidence coverage. Additionally, the Board hired a contractor in 1996 to reassess the market for mine subsidence insurance. The Division and Board made policy choices regarding the Program based on this information. Because these studies were conducted between 29 and 40 years ago, it is possible that the risk of mine subsidence and potential market for the Program have changed. By conducting a current evaluation to better understand the risk of subsidence and market for mine subsidence protection, reviewing program costs and fees, and considering changes to the Program's structure, the Division can ensure that the Program is making the best use of available funds, and is sustainable in the long-term.

Recommendation 2

The Department of Natural Resources should ensure that the Mine Subsidence Protection Program (Program) within the Division of Reclamation, Mining, and Safety (DRMS) is providing protection against the risk of mine subsidence; is able to increase participation; and ensures the sustainability of the Colorado Coal Mine Subsidence Trust Fund by:

- A. Evaluating the current risk of mine subsidence in the state and the likelihood of qualifying claims being filed by participants. This should include a review of the ongoing likelihood of mine subsidence occurring in areas with homes that are currently eligible for the Program, as well as in areas with homes built in 1989 and later and with commercial properties that are currently ineligible, to better understand the potential market for coverage in the state.
- B. Reviewing the Program's use of contractors to conduct home inspections. This should include evaluating the potential to reduce costs by using contractors with less technical expertise to perform enrollment inspections and establishing guidance regarding the maximum amount that should be spent on inspections, considering the type of inspection and its purpose.
- C. Using the information collected in parts A and B, assess the overall structure and operation of the Program and consider changes to increase participation, maximize the benefits it provides relative to administrative costs, and ensure its sustainability. This could include evaluating expanded eligibility followed by a reassessment of the viability of the Program providing coverage through private insurers, changing inspection requirements, and making changes to its fee structure.

- D. Based on the information obtained through Parts A, B, and C, implement any necessary program changes and work with the Mined Land Reclamation Board, the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement, and General Assembly to change program rules, grant requirements, and statutes, as needed.

Response

Department of Natural Resources

A. Agree

Implementation Date: June 2026

DRMS will review current state of practice necessary to develop up-to-date risk evaluations for homes both currently eligible and potentially eligible under expanded eligibility criteria. Since this evaluation will require the Division to hire outside expertise, a cost proposal will be developed along with a potential Statement of Work to perform this evaluation. This proposal will be presented to the Mined Land Reclamation Board (MLRB) for their approval of expenditure from the Trust fund for this purpose. If approved by the MLRB, the Division would solicit a Request for Qualifications to perform this evaluation.

B. Agree

Implementation Date: December 2025

The Division will evaluate the potential for reducing costs by using contractors or staff with less technical expertise to perform enrollment inspections and will establish appropriate guidance regarding the maximum expenditure amount for various inspection types. Any guidance setting maximum expenditure amounts will require Mined Land Reclamation Board approval.

C. Agree

Implementation Date: December 2026

The Division will use the information collected in parts A and B to assess the overall structure and operations of the Program and propose any potential changes for Board consideration related to increasing participation, maximizing the benefits it provides relative to administrative costs, and ensuring its sustainability. The Division will evaluate expanding eligibility for enrollment in the Program, reassess the option of the Program providing coverage through private insurers, evaluate current inspection requirements and fee structure to identify areas in need of updates/changes.

D. Agree

Implementation Date: December 2026

The Division will work with the MLRB, OSMRE and the General Assembly to address and implement any necessary program changes and to revise/update program rules, grant requirements, and statutes, as needed.





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