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ILLINOIS COAL MINE SUBSIDENCE LAW

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Sharon Sigwerth**

In 1880, the Illinois Supreme Court established an absolute right to subjacent support in the surface owner. This Article explores the coal mine subsidence law that has since developed in Illinois. The authors review the principles of liability established by the case law and discuss the associated legal problems. They also examine legislation dealing with coal mine subsidence, including Illinois and federal laws.

Central and southern Illinois has been the site of much coal mining since the mid-nineteenth century. Consequently, Illinois property owners in these areas are confronted with the serious problem of surface subsidence from abandoned underground mines. The resulting increase in property damage has generated growing public concern.

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1. HOUSE EXECUTIVE SUBCOMMITTEE ON MINE SUBSIDENCE, RESEARCH REPORT AND RECOMMENDATIONS 7 (1976) [hereinafter cited as HOUSE RESEARCH REPORT]. See also note 3 infra.

2. Subsidence has been defined as "a downward movement of the ground surface caused by solution and collapse of underlying soluble deposits, rearrangement of particles upon removal of underground mineral deposits, or reduction of fluid pressures within an aquifer or petroleum reservoir." C. SCHWARZ, E. THOR & G. ELSNER, WILDLAND PLANNING GLOSSARY 211 (1976) (emphasis added).

3. J. NAWROT, R. HAYNES, P. PURSELL, J. D'ANTUONO, R. SULLIVAN & W. KLIMSTRA, ILLINOIS LANDS AFFECTED BY UNDERGROUND MINING FOR COAL 25, 35-37 (1977) [hereinafter cited as ILLINOIS LANDS]. This study identified 4,076 abandoned underground coal mines in Illinois and referenced 2,300 mining operations for which no site locations were available. An illustrative problem of surface subsidence caused by abandoned mines was faced by the Johnston City School District. The Johnston City Washington Elementary School was closed in 1972 after subsidence occurred. In 1974, after approximately one million dollars had been spent on construction of a new school building on the site of the old school, the ground subsided further and the construction had to be abandoned. See Board Sues Over School Damage, SOUTHERN ILLINOISAN, Dec. 21, 1976, at 3, col. 4.

Two factors apparently have been significant in creating the present problem. First, because of urban sprawl and general population growth, many old mines that once were located in sparsely populated areas now underlie portions of heavily-populated areas. As the ground above these mines subsides, the incidence of damage probably will increase. Second, timbers used for underground support in many old mines have decayed and may have become so weakened that they could give way at any time. Furthermore, many of the old mines may have had insufficient initial support due to mining practices such as “robbing” the coal of natural support pillars and failing to replace the coal pillars with timbers.

The potential exists for more subsidence in the future. Approximately ninety-five percent of Illinois’ coal, underlying sixty-five percent of the geographical area in the state, remains unmined. Because most of the coal available for surface mining already has been removed, or is in the process of being removed, future mining will concentrate on underground removal. This Article examines the law concerning coal mine subsidence in Illinois. The principles of liability established by case law and the associated legal problems are reviewed and discussed. Attention is also addressed to the legislation dealing with coal mine subsidence, including Illinois laws, the subsidence aspects of the federal Surface Mining Control and Reclamation Act of 1977 (Mining Control Act), and the Illinois response to that Act.

**ILLINOIS CASE LAW**

In 1880, in *Wilms v. Jess*, the Illinois Supreme Court handed down its first decision on coal mine subsidence and stated that the owner of a mineral estate in land could not remove minerals “without leaving support sufficient to maintain the surface in its natural state.” Therefore, the lower court’s award of money damages for injuries to the plaintiff’s house and well was sustained. The *Wilms* decision limited the rights of both the surface estate

5. For example, Springfield is located over a core of ground that is not undermined but is surrounded by undermined areas into which Springfield is expanding. *House Research Report, supra* note 1, at 5-6 (1976).

6. *Id.*

7. See Marquette Cement Mining Co. v. Oglesby Coal Co., 253 F. 107 (N.D. Ill. 1918) (injunction granted that restrained mining); Ciufieri v. Bullock Mining Co., 332 Ill. App. 1, 73 N.E.2d 855 (4th Dist. 1947) (reversed verdict against coal mining company for property damage due to subsidence); Hurst v. Sholl, 232 Ill. App. 169 (2d Dist. 1924) (affirmed judgment for damages due to subsidence from mining); Penn v. Taylor, 24 Ill. App. 292 (4th Dist. 1887) (reversed and remanded judgment against coal mining company due to defective jury instructions).


11. 94 Ill. 464 (1880).

12. *Id.* at 467.

13. *Id.* at 469.
owner and the mineral estate owner. First, the court noted that the surface owner and the mineral owner could regulate their respective rights by agreement, thus suggesting that the surface owner could completely waive the right to subjacent support. The court, however, stated that the particular lease provision in Wilms that granted the defendants “the right of way and surface of so much of the tract as may be necessary for economical use of the same” did not grant them the right to “destroy” the surface. Additionally, the court stated that the particular lease provision in Wilms that provided that “no pillars shall be withdrawn within six hundred feet of the [mine] shaft” did not authorize the removal of all other pillars. Although clearly tempered by strict judicial interpretations, this right of self-regulation has played a major role in the development of Illinois subsidence law.

Second, the court noted that the surface-support entitlement only required that the surface be maintained “in its natural state,” and that, therefore, subsidence caused by the weight of buildings constructed after execution of the mining lease was “in the nature of contributive negligence.” Such a defense, however, has not succeeded in any Illinois

14. The court found that while the severance of mineral rights from surface ownership ordinarily includes the means of obtaining or enjoying the mineral estate, such as the rights of ingress and egress, the mineral estate’s rights to use of the surface are not without limitation. See also Jilek v. C.W. & F. Coal Co., 382 Ill. 241, 250-51, 47 N.E.2d 96, 100-01 (1943), where the court affirmed a decree dismissing the suit in equity to quiet title to a mineral estate.

15. The Wilms court found that the right of support prevailed where there is “no evidence of title appearing to regulate or qualify their rights of enjoyment.” 94 Ill. at 467. The court further stated that

where a land owner sells the surface, reserving to himself the minerals with power to get them, he must, if he intends to have power to get them in a way which will destroy the surface, frame the reservation in such a way as to show clearly that he is intended to have that power. See also id. at 466-67.

16. Id. at 467-68.

17. Id. at 467.

18. Id. at 467-68.

19. Id. at 467-69. The court relied upon one English case, Humphries v. Brogden, 116 Eng. Rep. 1048 (Q.B. 1850), that has been considered the leading English case and a primary source of American subsidence law. In Humphries, the court held that the plaintiff was entitled to a verdict because of the defendant’s negligence in failing to leave sufficient support in a mine. As one commentator has noted:

Some American cases have followed Humphries v. Brogden’s theory that the right of subjacent support is a natural easement of support owed the dominant surface estate by the servient mineral estate. Other American courts have considered the right of subjacent support to be a right to the integrity of the surface estate.

20. See notes 96-134 and accompanying text infra.

21. See text accompanying note 12 supra.

22. 94 Ill. at 469. The court stated:

The act of removing all support from the superincumbent soil is, prima facie, the
case.\textsuperscript{23} The surface owner in Illinois has been able to recover for damages to buildings as an incident of the defendant's failure to support the surface in its natural state regardless of when the buildings were erected.\textsuperscript{24}

The Wilms discussion of contributory negligence suggested that the mineral estate owner's duty to provide support for the surface owner might require only that he or she meet a standard of due care. The Illinois Supreme Court, in \textit{Lloyd v. Catlin Coal Co.},\textsuperscript{25} however, stated that the right to subjacent support "is absolute and without condition."\textsuperscript{26} This dictum has been cited frequently in subsequent Illinois cases and apparently has laid to rest further negligence arguments.\textsuperscript{27}

When the Wilms court suggested that construction of buildings subsequent to the division in property ownership between the surface and the mineral owners might constitute contributory negligence,\textsuperscript{28} it said nothing
cause of its subsequently subsiding, but if the subsiding is, in fact, caused by the weight of buildings erected subsequent to the execution of the lease of the mine, this is in the nature of contributive negligence, and may be proved in defense. The authorities do not require that plaintiff's proof shall exclude that hypothesis in the first instance.

\textit{Id.}

\textsuperscript{23} The contributory negligence defense has been raised in two cases since Wilms. See Morris v. Saline County Coal Co., 211 Ill. App. 178 (4th Dist. 1918) (affirmed judgment against mining company for failure sufficiently to support surface); Donk Bros. Coal & Coke Co. v. Novero, 135 Ill. App. 633 (4th Dist. 1907) (affirmed award of damages for injury to surface caused by underground mining operations).

\textsuperscript{24} A different rule prevails in several other jurisdictions. For example, a Colorado court stated:

We find it to be a general rule of law that the owner of the surface rights who is damaged by the removal of subjacent . . . support is entitled to recover for any damage to the structure on the surface if it is established by a preponderance of the evidence that the damage was the result of lack of due exercise of care or skill or negligence on the part of the . . . subjacent owner.

\textit{Id.}

\textit{Id. at 468, 71 N.E. 335 (1904).}

\textit{Id. at 468, 71 N.E. at 338. The court stated:}

Appellant owns the surface, and, as a matter of law, is entitled to support from the subjacent owner. This right of support is absolute and without condition, not dependent upon the order of a court of chancery by injunction or upon the degree of care that may be used by appellee in the prosecution of its work. If by the removal of any of the coal or mineral under the land, though under the most approved system of mining, complainant, as the owner of the superincumbent and superior estate, is deprived of the necessary support for his land, then [at] that moment liability to respond to damages rests on appellee.

\textit{Id.}

\textit{Id. See, e.g., Tankersley v. Peabody Coal Co., 31 Ill. 2d 496, 202 N.E. 498 (1964) (coal mining company is not liable for subsidence of areas mined by predecessors); Ciuffari v. Bullock Mining Co., 332 Ill. App. 1, 73 N.E.2d 855 (4th Dist. 1947) (reversed verdicts for defendant coal mining company); Hurst v. Sholl, 232 Ill. App. 169 (2d Dist. 1924) (affirmed judgment of damages for subsidence caused by failure to leave sufficient support in mine); Jent v. Old Ben Coal Corp., 222 Ill. App. 380 (4th Dist. 1920) (affirmed judgment against coal mining company, ruling that subjacent owner is liable for injuries).}

\textsuperscript{25} Id. at 468, 71 N.E. 335 (1904).

\textsuperscript{26} Id. at 468, 71 N.E. at 338.

\textsuperscript{27} See text accompanying note 22 \textit{supra}.
expressly about buildings existing on the property before the division in ownership. While an argument can be made that the court was implying that such buildings automatically were entitled to support, such an argument contradicts the "bundle-of-rights" approach to ownership, which views the right to support of the soil as a natural, inherent part of the bundle of rights that comes with ownership. 29 Because a building is not a natural part of the landscape, it is conceptually difficult to place a building within the purview of this theory. Instead, an express or implied grant or reservation of an easement of support should be necessary to create the right to subjacent support for a building. While no Illinois subsidence case has reached this conclusion, 30 the Illinois Appellate Court for the Fourth District accepted this line of reasoning in a case involving lateral support, 31 and that decision was cited favorably by the same court in a subsidence case. 32

Although no case specifically states that Illinois follows the bundle-of-rights theory, 33 the result of Corcoran v. Franklin County Coal Co. 34 is explained best by this doctrine. The surface-ownership document in Corcoran contained a clause waiving liability for surface-subsidence damage. The defendant argued that it did not have to establish itself as a party to or

30. The court in Wilms, however, specifically referred to maintaining the surface "in its natural state." 94 Ill. at 467. It has been stated that "structures existing or contemplated at the time of the severance of the estates are entitled to support." 54 Am. Jur. 2d Mines & Minerals § 201 (1971). This statement can be explained by any one of three theories of recovery. The building owner can recover: (1) because the ground would have subsided without the building and loss to the building is a part of the incidental damage; (2) because of negligence on the part of the coal operator; or (3) because there has been an implied grant or reservation of support for the building under a traditional analysis. The third explanation is the most likely one for the cited authority.

31. In Starr v. Standard-Tilton Milling Co., 183 Ill. App. 454 (4th Dist. 1913), the court affirmed a judgment against the defendant/owner of a building erected next to the plaintiff's building. The court stated that "if the grantor desired to make any reservation whatever it should have been contained in his deed." Id. at 458. Although the court reached no conclusion on whether the mere existence of the building at the time of a "grant" of the surface estate would give rise to an implied grant of support for the building, the court indicated that it might. Id. at 458-60.
33. Specific references in the Illinois cases to a theory underlying the right to support present a mixed bag. Thus, in Wilms v. Jess, 94 Ill. at 467, the court referred to this theory as a "right of enjoyment," and in Lloyd v. Catlin Coal Co., 210 Ill. at 468, 71 N.E. at 338, the court stated that it arose "as a matter of law." In Ames v. Ames, 160 Ill. 599, 600, 43 N.E. 592, 593 (1896), however, the court referred to it as a "servitude." The leading case espousing the easement or servitude approach is Humphries v. Brogden, 116 Eng. Rep. 1048 (O.B. 1850). This case has been cited with approval by several American cases. See, e.g., Wilms v. Jess, 94 Ill. at 467. See also note 1 supra.
34. 249 Ill. App. 551 (4th Dist. 1929) (demurrer sustained in action to recover damages for subsidence). In Marquette Cement, the District Court for the Northern District of Illinois characterized the Illinois rule as one that assumes the bundle-of-rights approach, stating that "the Illinois rule . . . is that the right of support is absolute, a substantive part of the mass of rights constituting ownership of land. It is not an incident of ownership nor an easement." 253 F. at 114.
intended beneficiary of the waiver clause because the waiver showed that the surface owner never had received a right of subjacent support. 35 This argument was consistent with the implied-grant or reservation-of-an-easement approach to ownership. Under this approach there can be no implied grant of subjacent support in an instrument that contains a clause negating liability, as such a clause indicates the mineral estate owner’s lack of intent to grant the right initially. Because the plaintiff did not receive the right of subjacent support in the ownership document, the defendant argued that defendant could not be responsible for destroying such support. The court, however, appearing to perceive the right to subjacent support as inhering as a part of the bundle of rights transferred with ownership, rejected the defendant’s argument. 36 A waiver of a specific right otherwise obtained is granted for the benefit of those specific parties to whom the waiver is directed. In order to be successful, then, the defendant would have had to connect itself to the waiver clause.

What apparently has developed from the Wilms case is the surface owner’s inherent substantive right to subjacent support. How this right has fared since the Illinois judiciary’s early liberal interpretations of it will be discussed in the context of the specific issues that have been considered by the courts.

Parties to a Suit

In Illinois subsidence cases, the identification of parties entitled to sue or be sued and the circumstances under which suit may be brought are unsettled questions. The following considerations have concerned the Illinois courts: (1) plaintiffs’ and defendants’ interests; (2) corporate structuring and restructuring; (3) the statute of limitations; and (4) waiver.

1. Plaintiffs’ and Defendants’ Interests

Most suits involving subsidence fall into one of two categories: (1) those brought by surface fee owners against coal companies who are both the owners and the developers of the coal; 37 and (2) those brought by surface owners against coal developers who are lessees of the coal owners. 38 A number of other suits, however, have questioned the standing or status of specific categories of plaintiffs or defendants.

35. 249 Ill. App. at 552-53.
36. Id. at 553.
The standing of a subsidence plaintiff has been sustained in a variety of circumstances. The Illinois Appellate Court for the Fourth District found standing where the plaintiff relied on deeds conveyed in 1905 and 1906 and possessed the surface in 1920. The court held that this evidence constituted *prima facie* title to the surface estate. The same court rejected the defendant's challenge to the plaintiff's standing where plaintiff, a contract purchaser, was in possession of the surface. Other plaintiffs whose rights to sue have been upheld include a surface owner who had purchased his title at a master's sale, a trustee of the surface estate, surface tenants who were permitted to sue along with the surface fee owners, and the owner of an underground cement mine that was situated above the defendant's coal mine.

Questions concerning the status of defendants have focused on whether the coal owner can be sued when the owner has leased the coal for development to another entity. According to the general rule, a lessor of mining property is liable for lessee-caused surface subsidence only when: (1) the lessor had control over the lessee's operations; (2) the lease expressly provided for operations that resulted in subsidence; (3) the lessee knew or should have known at the time of execution of the lease that the operation would cause subsidence; or (4) the lessor consented to or ratified negligent operations, with actual knowledge of that negligence. The only Illinois case that specifically ruled on this question permitted the coal owner-lessee to be sued. In *Ciufieri v. Bullock Mining Co.*, the Appellate Court for the Fourth District ruled that the evidence indicated the coal owner had exercised control over the mining operation.

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42. *Seitz v. Coal Valley Mining Co.*, 149 Ill. App. at 85 (2d Dist. 1909) (affirmed judgment for trustee against coal mining company for damage to surface and building located upon surface).
43. *Tankersley v. Peabody Coal Co.*, 31 Ill. 2d 496, 202 N.E.2d 498 (1964); *Buis v. Peabody Coal Co.*, 41 Ill. App. 2d 317, 190 N.E.2d 507 (3d Dist. 1963) (judgment against coal company, however, was reversed due to miscalculation of damages).
44. *Marquette Cement Mining Co. v. Oglesby Coal Co.*, 253 F. 107 (N.D. Ill. 1918). The cement mine, although underground, was situated above the defendant's coal mine. The court concluded that the owner of a higher stratum of the earth had the same rights as the owner of the actual surface and allowed the cement mine owner to sue. The court stated that the word "surface" was not restricted to the highest level of the earth, but instead included "that part of the earth or geological section lying over the minerals in question." *Id.* at 111-12.
45. *Butte Copper & Zinc Co. v. Pogue*, 164 F.2d 201, 203-04 (9th Cir. 1947) (judgment against the coal company reversed due to the wording of the lease and status of the parties).
46. The question was raised but not resolved in *Hurst v. Sholl*, 232 Ill. App. 169 (2d Dist. 1924). The *Hurst* court did not decide the matter because it found that the defendant's plea of the "general issue" did not raise the question of the operation of the mine versus ownership of the coal. *Id.* at 176.
47. *Id.* at 13-14, 73 N.E.2d at 861. The court found it significant that the owner had reserved the right to appoint a competent inspector who was authorized to inspect all property and all mining operations, had leased not only the coal but the mine shaft, buildings and
The same court made it clear that an owner cannot avoid the duty to provide lateral support merely by hiring an independent contractor. In *Starr v. Standard-Tilton Mining Co.*, 49 the court stated that liability depends upon whether the damage results from activity central to the agreement of the parties or from activity "merely collateral" to the agreement. 50 Applying this approach to subjacent support issues implies that a coal owner's ability to escape liability when leasing mineral rights for development would be much narrower than that allowed by the general rule. In *Ciufieri*, the court gave its approval to the earlier lateral support rule in *Starr*, 51 but found both the existence of a right to control and evidence of actual control. The court therefore concluded that the lease in question was "an arrangement for continuing the operation of a coal mine," rather than a mere lease of the coal rights. 52 *Starr* and *Ciufieri* thus indicate that when an Illinois coal owner has leased coal for development the scope of its liability for surface subsidence will remain unknown until litigation compels a clear ruling.

Where specific challenges have been made to the status of particular plaintiffs or defendants, the decisions have favored the plaintiffs and have been consistent with the general approach taken in *Wilms*. The net result of plaintiff or defendant standing or status cases has therefore been the recognition of an important substantive right to support. If the Illinois courts adhere to these decisions and adopt the *Starr* reasoning that holds owners who lease coal for development responsible for the necessary consequences of that development, they will maintain the *Wilms* approach. The final analysis, however, may require consideration of whether coal owners and developers should bear the burdens of that development, whether the burdens should be borne by those who suffer subsidence damages, or whether the public at large should assume the burdens. The moral dilemmas surrounding the allocation of these burdens suggest that the issue should not be resolved through consideration of legal doctrines.

49. 183 Ill. App. 454 (4th Dist. 1913).

50. Id. at 461.

51. The *Ciufieri* court stated that "'[i]f the injury results directly from the acts called for or rendered necessary by the contract and not acts which are merely collateral to the contract, the employer is as liable as if he had himself performed such acts.'" 332 Ill. App. at 12, 73 N.E.2d at 860, quoting *Starr v. Standard-Tilton Milling Co.*, 183 Ill. App. at 461. The *Ciufieri* court further stated that allowing the owner of the mineral estate to avoid liability for surface support while exercising coal rights through an "irresponsible lessee" would place an undue hardship on the owners of the surface estate. 332 Ill App. at 12, 73 N.E.2d at 860.

52. 332 Ill. App. at 12, 73 N.E.2d at 860.
Corporate reorganizations and sales of corporate assets can confuse the identification of parties who are liable for subsidence. An Illinois statute provides that in cases of consolidation or merger, successor corporations are "liable for all the liabilities and obligations of each of the corporations so merged or consolidated." \(^{53}\) Thus, in a case where six corporations had been merged into one new corporation and both a predecessor and the successor corporation had mined some of the coal, the court held that the successor was liable for all subsidence. \(^{54}\) Few cases, however, have been that simple to resolve.

In *Buis v. Peabody Coal Co.*, \(^{55}\) the defendant purchased coal that remained in the ground after the seller had discontinued its underground mining operations. Because the relationship between the parties was that of an arm's-length buyer and seller, the Illinois Appellate Court for the Third District concluded that the defendant was liable to the plaintiff only for subsidence caused by its own mining. The court noted that the defendant's liability for seller-caused subsidence can only result from an express or implied assumption of such liability. In finding the defendant liable only for its own activity, the *Buis* court observed that holding the purchaser of the assets of an extinct coal company liable for subsidence occurring years later could result in a flood of litigation. \(^{56}\)

The *Buis* approach was adopted a year later by the Illinois Supreme Court in *Tankersley v. Peabody Coal Co.* \(^{57}\) Although the *Tankersley* court stated that its ruling would cause no loss to the surface owner, \(^{58}\) the court ignored the concerns of surface owners who are left without a remedy for damages caused by defunct mining companies. The court reasoned that because surface owners are on notice of the existence of an underground mine and of the severed underlying mineral interest, they take these matters into account when negotiating the purchase price for the surface. \(^{59}\)

The *Tankersley* decision has placed unnecessary burdens on both the buyers and sellers of surface rights. The surface owner supposedly has an "absolute" right to surface support. Yet, under *Tankersley*, the possible purchaser must calculate the extent to which the potential subsidence that may result from a severed mineral interest or underground mine will affect the value of the surface. Additionally, when the mineral interest is severed and sold, the owner, in setting the price for the mineral interest, must either


\(^{55}\) 41 Ill. App. 2d 317, 190 N.E.2d 507 (3d Dist. 1963).

\(^{56}\) Id. at 323, 190 N.E.2d at 510. In *Buis*, Peabody purchased the coal in 1916, but the subsidence did not begin until 1949.

\(^{57}\) 31 Ill. 2d 496, 202 N.E.2d 498 (1964). The court stated that either an express assumption of liabilities or a sufficient relationship between two business entities would be necessary to justify imposing the liabilities of the predecessor mining operation on its successor.

\(^{58}\) Id. at 502-03, 202 N.E.2d at 502.

\(^{59}\) Id. at 502-03, 202 N.E.2d at 501-02.
consider future calculations to be made by subsequent purchasers or suffer the loss in surface value attributable to potential subsidence when a subsequent purchaser refuses to pay the full price for the surface.

Another problem arising from Tankersley involves the situation in which the first purchase of the surface estate occurs with no indication that mining will take place in the foreseeable future, but mining has begun by the time the next sale of the surface estate occurs. Because the possibility of subsidence will increase with the onset of mining, the original purchaser might suffer an irremediable loss upon his or her subsequent sale. The possibility of subsidence, the probability of subsidence, and the actual occurrence of subsidence are distinct concepts and cannot be assigned the same value. A slight reduction in price based on the assumption that improper mining will occur and possibly result in subsidence does not compensate adequately for the actual loss that occurs when the surface in fact subsides.

These problems arose partly because the Tankersley court's reliance on the Pennsylvania case, Noonan v. Pardee, was misplaced. The Tankersley court quoted with approval the Noonan court's observation that "it is not improbable that this risk [of subsidence] enters largely into the commercial value of all like surface land in that region." The Noonan court additionally stated, however, that "each grantee has the right to presume that the subjacent owner has performed his legal duty; and the price, while probably somewhat depreciated by the possible risk, is not fixed on a presumption that his land will subside because of any special failure" by the person who has mined the coal. This additional language substantially impairs the impact of the Noonan language quoted by the Tankersley court. Additionally, the Noonan court had to consider the Pennsylvania statute of limitations that required suits to be brought within six years from the time of coal removal. Because all the parties involved with coal mining in Pennsylvania know that there can be no recourse against any miner after six years, surface owners might well attempt to include the post six-year subsidence risk in the purchase price. Further, a Pennsylvania surface owner can choose to rely on the right of access to the mine to ensure that the duty to preserve the surface is being performed, rather than relying on price adjustment. In contrast, Illinois suits based on subsidence need not be brought within six years of the mining because the Illinois statute of limitations does not begin.

60. 200 Pa. 474, 50 A. 255 (1901).
61. 31 Ill. 2d at 503, 202 N.E.2d at 502, quoting Noonan v. Pardee, 200 Pa. at 484, 50 A. at 257.
62. 200 Pa. at 486, 50 A. at 257.
63. Id. at 483-84, 50 A. at 256-57.
64. This right of access is enforceable in the courts if the mine operator denies access to the surface owner. Id. at 484, 50 A. at 257. See also cases cited in note 85 infra. There is no indication in any Illinois case of a similar right on the part of the surface owner to take action to protect the surface. See Tankersley v. Peabody Coal Co., 31 Ill. 2d 496, 202 N.E.2d 498 (1964); Buis v. Peabody Coal Co., 41 Ill. App. 2d 317, 190 N.E.2d 507 (3d Dist. 1963).
to run until the subsidence occurs and there is no alternative right of access.\textsuperscript{65} Forced pricing of the risk would therefore be inappropriate in Illinois.

The \textit{Tankersley} court assumed that the purchaser of a surface estate takes with notice of both the underlying severed mineral interest and the existence of underground mines.\textsuperscript{66} This assumption may be correct with respect to the mineral interest because knowledge of such is based on either actual notice or the familiar recording statutes.\textsuperscript{67} Because Illinois has an underground coal mine mapping statute, the court also assumed that the public records provide additional notice of the mine underneath the surface.\textsuperscript{68} If the mapping system functioned properly, those mines operating after the law took effect in 1911 would indeed be indexed as part of the title record of the property affected,\textsuperscript{69} although mines closed prior to 1911 would not be recorded. A review of title records, however, indicates that the system has not worked.\textsuperscript{70}

\begin{footnotesize}
\begin{enumerate}
\item 31 Ill. 2d at 503, 202 N.E.2d at 502.
\item Id.
\item In holding that the coal mine operator was not liable for surface subsidence, the Illinois Supreme Court in \textit{Tankersley} stated:
\begin{quote}
The rule enunciated today works no hardship on the owners of the surface lands overlying mine excavations. When such owners purchase they are clearly on notice of the separate underlying mineral interest, as a result of a prior title examination or from the fact that our statutes require that a copy of maps of all coal mines in the county, whether 'operating' (Ill. Rev. Stat. 1963, chap. 93, pa. 33.01 et seq.), or 'abandoned' (Ill. Rev. Stat. 1963, chap. 93, par. 34.01 et seq.) be filed and kept in the office of the county recorder. Moreover, the statutes require that maps of new, proposed, or reopened mines be promptly indexed by the county recorder as part of the title record of the property affected. (Ill. Rev. Stat. 1963, chap. 93, par. 33.09). Thus, the fact that there are or may be underlying mine excavations is a practical ingredient in the purchase price of such properties.
\end{quote}
\item A mapping requirement for underground mines first was enacted in 1872, but that law merely gave the mine inspector the authority to require a map. Act of March 27, 1872, § 1, 1871-72 Ill. Laws 568. In 1879, the map requirement was made mandatory, but it only had to be filed with the inspector and kept at the appropriate regional office. Act of May 28, 1879, § 1, 1879 Ill. Laws 204-05. An act in 1899 finally required that a copy of the map be turned over to the county recorder. Act of April 18, 1899, § 1(g), 1899 Ill. Laws 300, 302. Then, in 1911 the legislative assembly required the county recorder to index the map as a part of the title record of the property affected. Act of June 6, 1911, § 7(g), 1911 Ill. Laws 388, 98.
\item A recent inquiry at the county recorder's office in three southern Illinois coal mining counties disclosed that such maps have not been indexed as a part of the title records in any of the three counties. Apparently the recorders in these counties were not aware that a law required such indexing. In one county where an index is kept to the maps themselves, the index is kept by name of the mine, so that a searcher must know the name of the mine he or she is interested in before the relevant map can be located. In another county the recorder and his staff did not know where the maps were kept and outside assistance was necessary to identify their location. In two of the counties, the maps were simply placed loose in a drawer. In the third county the maps were on microfilm and, consequently, indexed. Report of Ronald W. Arbeiter to Professor Robert E. Beck Concerning Visits to Franklin, Jackson, and Williamson
\end{enumerate}
\end{footnotesize}
The Illinois Appellate Court for the Fourth District considered the problems created by corporate dissolution and by the parent-subsidiary relationship in *Edwards v. Chicago & Northwestern Railway*. The action was brought by a surface owner against a parent corporation, the mining subsidiary, and the subsidiary's five directors. The court upheld dismissal of the suit as to the subsidiary and its directors, but reversed the dismissal as to the parent corporation. The court's decision with respect to the subsidiary and its directors was based on an Illinois statute that requires any action against a dissolved corporation or its directors to be "commenced within two years after the date of such dissolution." The plaintiff in *Edwards* failed to meet this requirement. This statute also provides that any action brought after dissolution must relate to "any right or claim existing, or any liability incurred, prior to such dissolution." Under this statute, therefore, no liability can accrue to the dissolved corporation or its directors where no subsidence has occurred prior to dissolution.

In concluding that the parent in *Edwards* was subject to suit, the appellate court noted that the allegations of the complaint were sufficient on two points: first, there was a "unity of interest and ownership" between the parent and subsidiary; and second, recognition of their separate identities would "present an obstacle to the due protection or enforcement of public or private rights." This decision and Illinois decisions unrelated to coal mining imply that a mere unity of interest and ownership between two corporations is insufficient to make a parent company liable for the acts of its

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72. The parent corporation, Chicago and Northwestern, owned all of the stock of a subsidiary, Superior Coal Co., except for the shares the directors of the corporation had to hold in order to qualify as directors. The subsidiary dissolved and the parent received all of its assets. The plaintiff sued Superior, its five directors, and Chicago and Northwestern. *Id.* at 50-51, 223 N.E.2d at 164.
73. *Id.* at 55, 223 N.E.2d at 166.
74. ILL. REV. STAT. ch. 32, § 157.94 (1957). The statute remains unchanged today.
75. In *Edwards*, the suit was commenced eight months after the two years had expired. 79 Ill. App. 2d at 51, 223 N.E.2d at 164.
76. ILL. REV. STAT. ch. 32, § 157.94 (1957).
77. 79 Ill. App. 2d at 52-53, 223 N.E.2d at 165.
78. *Id.* at 53, 223 N.E.2d at 165, quoting Ohio Tank Car Co. v. Keith Ry. Equip. Co., 148 F.2d 4, 6 (7th Cir. 1945).
79. See Dregne v. Five Cent Cab Co., 381 Ill. 594, 46 N.E.2d 386 (1943) (court refused to hold parent cab company liable for injuries to a passenger in a cab owned by its subsidiary company when the subsidiary was not fraudulently organized); Kruse v. Streamwood Utils. Corp., 34 Ill. App. 2d 100, 180 N.E.2d 731 (1st Dist. 1962) (court failed to find that a conspiracy to take advantage of the plaintiffs existed between the parent utility company and its subsidiary and, therefore, refused to hold the parent company liable for the subsidiary's actions).
subsidiary. In the Edwards case, the parent received the subsidiary's assets upon dissolution, and, according to the plaintiffs' allegations, fraudulently performed certain acts and made certain statements that caused the plaintiffs to delay their suits against the subsidiary until the two years had elapsed.

These few Illinois cases dealing with corporate structuring in the coal mining context result in a substantial burden being placed on persons suffering damage from coal mine subsidence. As the court so appropriately observed in the Buis case: "Mining companies have flourished and died. No assets remain and there is nothing remaining except the old coal passageways under the ground." These decisions have aggravated the situation by substantially insulating successors-in-interest from responsibility for their predecessors' conduct. The courts have concluded that such insulation would further mining absent any real evidence suggesting that contrary decisions would substantially impair mining. The Illinois courts have reasoned that purchasers of the surface estate consider the possibility of subsidence when they determine the surface purchase price. By analogy, the courts could have stated that if the mineral estate purchaser will be held responsible for the subsidence caused by the seller's mining, the purchaser will take that responsibility into account when setting the coal's price. This approach would place some responsibility for subsidence on the previous miner, as that miner would have received less for its coal. The problem, unfortunately, is only partially alleviated by the Illinois statute providing for continued responsibility following corporate merger and consolidation.

3. The Statute of Limitations

The Illinois statute of limitations provides that actions to recover damages for injury to real property must be commenced within five years of the accrual of the cause of action. Several Illinois courts have considered the problem of calculating the precise time of accrual for a cause of action arising out of mining activities. In Treece v. Southern Gem Coal Corp., the Appellate Court for the Fourth District reasoned that the cause of action could accrue at one of two times: either when the support was removed from the surface, as the Pennsylvania cases held, or when the subsidence occurred.

80. The Illinois Supreme Court, in Dregne, stated that the parent corporation will be liable for its subsidiary's acts only if "there is such unity of interest and ownership that the individuality of the one corporation and the owner or owners of its stock has ceased, and further, that the observance of the fiction of separate existence would under the circumstances sanction a fraud or promote injustice." 381 Ill. at 604, 46 N.E.2d at 391.

81. 79 Ill. App. 2d at 51, 223 N.E.2d at 164.

82. 41 Ill. App. 2d at 323, 190 N.E.2d at 510.


84. 245 Ill. App. 113 (4th Dist. 1923).

as the English, 86 Alabama, 87 Kansas, 88 and New Jersey 89 cases held. The Treece court found the second line of authority persuasive 90 because it more adequately protected the plaintiff's interests. 91

Two Illinois decisions that reaffirmed Treece's time-of-occurrence approach to accrual also discussed the consequences of amending a deficient complaint. 92 The courts relied on the Illinois Civil Practice Act, 93 which provides that the amendment shall relate back to the date of the original complaint for limitation purposes if the subject matter of the amendment "grew out of the same transaction or occurrence set up in the original pleading." 94 In both cases, the courts found that the subject matter of the amendment grew out of the same transaction or occurrence as that described in the original pleading. 95 Thus, the Illinois statute of limitations cases are consistent with the general approach taken in Wilms: the right to subjacent support is an important substantive right entitled to serious protection in the courts.

4. Waiver

Where the surface of land belongs to one individual and the underlying minerals to another, the owner of the minerals is liable when he or she

87. See West Pratt Coal Co. v. Dorman, 161 Ala. 389, 49 So. 849 (1909).
90. 245 Ill. App. at 118-19.
91. Id. See also note 185 infra. The defendant in Treece argued that the cause of action arose at the time of the removal of the support and, therefore, it could not be assigned to the plaintiff either separately or as part of the transfer of the surface ownership because it was a personal cause of action. The court found it unnecessary to discuss the nature of the action until the subsidence occurred, and at that time the plaintiff owned the surface. 245 Ill. App. at 119. Thus, the cause of action accrued directly to him and no question of its transfer arose.

Although the question of transferability has yet to be resolved in the subsidence context, the general rule in Illinois on assignability of choses in action states that "a chose in action of such nature that it would survive and pass to the personal representative of its owner on his death can be effectively assigned." 3 I.L.P. Assignments § 12 (1953). That authority further states that "a cause of action arising from torts to property, real or personal, is assignable." Id. § 15.
94. Id.
95. Savant v. Superior Coal Co., 5 Ill. App. 2d 109, 125 N.E.2d 148 (3d Dist. 1955) (amended complaint, alleging that five years before it was filed defendant caused subsidence of plaintiff's land by removing coal without leaving sufficient support, grew out of the same occurrence set up in the original complaint alleging that two years before filing suit defendant's same actions caused subsidence of plaintiff's land); Wanless v. Peabody Coal Co., 294 Ill. App. 401, 13 N.E.2d 966 (3d Dist. 1938) (amended complaint, stating that six corporations consolidated under the name of Peabody Coal Co. and the original Peabody Coal Co. caused subsidence damage by improper removal of coal, grew out of same occurrence set up in original complaint directing same allegation solely toward the original Peabody Coal Co.).
removes them without leaving sufficient support to maintain the surface in its natural state.\(^96\) The surface owner can waive the right to support, however, with "express words of waiver or by necessary implication from the language used"\(^97\) in the deeds. After initially adopting a plaintiff-sympathetic posture, Illinois courts subsequently moved toward a broad construction of waiver clauses—a position they maintain presently.

Early Illinois courts vigorously scrutinized purported waiver clauses; clear, specific language was required in order to raise a presumption that the surface owner had given up the right of support.\(^98\) Clauses permitting the removal of "all coal and minerals,"\(^99\) "including the ribs and pillars,"\(^100\) were held insufficient to waive the right to subjacent support.\(^101\) Such language was not considered sufficiently precise to indicate that the parties had contemplated either subsidence damage to the surface\(^102\) or a waiver of liability if such damage did occur.\(^103\) A clause extending the right to mine coal while doing "as little damage to the surface" of the land as was convenient\(^104\) also was held insufficient to relieve the mineral owner of liability for subsidence damage.\(^105\) Although this language implied that surface damage would certainly result from the mining, the Illinois Appellate Court for the Second District stated that the language implied a waiver of liability only for damages resulting from legitimate surface activities.\(^106\) These clauses,

\(^96\) Wilms v. Jess, 94 Ill. at 467.
\(^98\) Id. See Marquette Cement Mining Co. v. Oglesby Coal Co., 253 F. at 111; Wilms v. Jess, 94 Ill. at 468-69.
\(^99\) Wilms v. Jess, 94 Ill. at 466.
\(^100\) Seitz v. Coal Valley Mining Co., 149 Ill. App. at 85. The grantee had the "right to extract . . . all the said coal . . . including the ribs and pillars . . . ." Id.
\(^101\) Wilms v. Jess, 94 Ill. at 468-69; Seitz v. Coal Valley Mining Co., 149 Ill. App. at 93.
\(^102\) The surface owner may expect the mineral owner to install artificial supports if the right to remove all of the coal was exercised.
\(^103\) Because neither clause mentions liability, there is no clear implication from the language used that liability was waived. The Wilms court stated that the grantee "must, if he intends to have power to get [the coal] in a way which will destroy the surface, frame the reservation in such a way as to show clearly that he is intended to have that power." 94 Ill. at 468.
\(^104\) Seitz v. Coal Valley Mining Co., 149 Ill. App. at 86.
\(^105\) Id. at 93.
\(^106\) Id. at 93. In reaching this conclusion, the Seitz court relied on Williams v. Hay, 120 Pa. 485, 14 A. 379 (1888). The deed in Williams provided that "in mining and removing the coals, iron ore and minerals aforesaid, [defendant] shall do as little damage to the surface as possible." Id. at 495-96, 14 A. at 382. The Williams court refused to recognize this language as an effective waiver and stated:

[An absolute right to surface support is not to be taken away by a mere implication from language which does not necessarily import such a result. The owner of the coal had certain surface rights which were indispensable to the carrying on of his mining operations, such as the right to go upon the surface to make explorations for the minerals beneath, and bore holes, sink shafts, drifts, etc., and the right to make roads, and erect structures for taking out the coal. Hence it is a fair construction of the deed to say that, in doing these things, as little damage was to be done to the surface as possible. The provision referred to covers these matters; and, as we have a subject to which it directly applies, it would be a strained interpretation of the
therefore, did not give rise to the necessary implication that the right of support had been waived by the surface owner. Only a waiver clause explicitly stating that the mineral owner had the right to mine coal without risking liability for any resulting surface subsidence was held to be an effective liability-insulator.107

Strict construction of waiver clauses ended, however, in Boyer v. Old Bewn Coal Corp.108 The Boyer court held that the surface owner had expressly waived109 the right of support with a clause giving the mineral owner the right to mine coal “without liability for any damage to the surface” occurring either at the time of coal removal or any time thereafter.110 Prior Illinois decisions had limited this type of language to damage resulting solely from surface activities because of its failure to refer specifically to liability for subsidence damage.111 Arguably, then, the Boyer court erroneously departed from precedent in stating that the clause contained an express waiver of liability for surface subsidence damage. The Boyer court incorrectly relied on a Pennsylvania case112 in which the court referred to similar language113 as being “express and distinct.”114 In that case, how-

deed to hold that it was intended to take away the right of surface support.  

Id. at 496, 14 A. at 382-83.

107. See Wesley v. Chicago, Wilmington & Franklin Coal Co., 221 Ill. App. 427 (4th Dist. 1920). The court sustained the defendant’s contention that it was exculpated by a waiver clause. Although the opinion does not contain the specific language of the clause, it appears from the court’s discussion that the language waived liability for any subsidence damage resulting from the defendant’s operations in language similar to that found in two other Illinois cases where the language of the clauses were not at issue. The deed in Jilek v. Chicago, Wilmington & Franklin Coal Co., extended the right to mine “without any liability for surface subsidence caused by mining out of the coal or other minerals and from not leaving pillars or artificial supports under said land.” 382 Ill. at 243, 47 N.E.2d at 97. Morris v. Saline County Coal Co. involved a lease that stated the grantee had the “right and privilege to excavate, mine, take out and remove all of the coal from or on said premises without any liability for surface subsidence occasioned thereby.” 211 Ill. App. at 181.

108. 229 Ill. App. 56 (4th Dist. 1923).

109. Id. at 58.

110. Id. at 57-58.


113. In Scranton, there was a conveyance of coal with the right to mine and remove the same without “any liability for any injury that may result to the surface of the said premises from the mining and removal of the said coal.” 94 Pa. at 18-19. The Boyer court also cited the following seven cases where the waiver clauses containing similar language insulated the mineral owner from liability for surface subsidence: Paull v. Island Coal Co., 44 Ind. App. 218, 88 N.E.959 (1909); Charnetski v. Miners Mill Coal Mining Co., 270 Pa. 459, 113 A. 683 (1921); Weakland v. Cymbria Coal Co., 262 Pa. 403, 105 A. 558 (1918); Stilley v. Pittsburgh-Buffalo Coal Co., 234 Pa. 492, 83 A. 478 (1912); Miles v. Pennsylvania Coal Co., 217 Pa. 449, 66 A. 7643 (1907); Madden v. Lehigh Valley Coal Co., 212 Pa. 63, 64, 61 A. 559, 560 (1905); Godfrey v. Weyanoke Coal & Coke Co., 82 W. Va. 665, 97 S.E. 186 (1918). In the Miles case, however, there was specific reference in the clause to “falling in” of the “surface,” making that clause clearly different from the others.

ever, because the mineral owner was precluded by the sale contract from using any portion of the surface in its mining operations, the clause could have been applied only to subsidence damage resulting from subsurface activities. Thus, the Pennsylvania court viewed the waiver clause as express only because of its particular factual context, not because of its particular language.

The Boyer court should have relied on the Pennsylvania opinion at most to argue that the waiver in Boyer arose by necessary implication from the language employed. The deed in Boyer contained a separate paragraph relating to the right to use the surface. A special provision therein dealt with liability for any surface activities. Thus, it could have been argued in Boyer, as in the Pennsylvania case, that by necessary implication the waiver language in question only related to surface damages resulting from subsurface activities because there was no surface activity to which it could attach. Furthermore, the waiver clause in Boyer also contained language that exempted the mineral owner from liability for damage occurring at any time after removal of the coal. Because subsidence is the most likely type of future damage, this also could necessarily imply that liability for subsidence damage had been waived.

Unfortunately, the Boyer court ignored this analysis and concluded that the language constituted an express waiver of support. Consequently, whenever language similar to that found in Boyer has been at issue, Illinois courts have concluded that there was an effective waiver without carefully analyzing the waiver clause or the surrounding facts. Clauses exempting the mineral owner from liability “for any damage done to the surface of [the] land,” or “waiving, releasing and surrendering any and all claims for damages and all liability by reason of damages . . . to . . . [the] property”.

115. Id. at 18.
117. See note 110 and accompanying text supra.
119. Cope v. United States Fuel Co., 229 Ill. App. at 244 (emphasis added). The waiver clause in Cope stated that “[t]he grantors hereby expressly covenant that the grantee has the right to mine and remove all of said vein of coal and that he shall not be liable for any damage done to the surface of land in so doing.” Id.
120. Mason v. Peabody Coal Co., 320 Ill. App. at 352, 51 N.E.2d at 286 (emphasis added).

The surface owner granted the mineral owner the right to enter beneath the surface of said premises, and mine, dig and remove the coal and other minerals therefrom . . . hereby . . . forever waiving, releasing and surrendering any and all claims for damages and all liability by reason of damages either to persons or property which may in any way be caused or occasioned at any time hereafter, directly or indirectly, by the mining or removing of coal or other minerals from said premises, or by the enjoyment of any of the rights and privileges hereby granted . . . .

Id.
have been held to be effective waivers.  

Under strict construction, however, both clauses could be construed as limited to damage resulting from surface activity. Thus, despite the strict construction approach of the early Illinois cases requiring clauses specifically waiving liability for subsidence damage, a waiver clause currently is more likely to be effective if the scope of its language is general. 

Waiver clauses have been attacked as void on two grounds: (1) because they lack any separate consideration; and (2) because they are contrary to public policy. The lack-of-consideration argument has never been fully discussed and was dismissed in an appellate decision simply because the surface owner accepted a deed containing the waiver language. At the very least, the appellate court should have inquired whether the sum paid for the coal was commensurate with the full value of the entire tract. The public policy argument also was rejected under the theory that individuals enjoy the right of freedom to contract and, therefore, it is not against public policy to hold them to an agreement they made with each other.

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121. Id. at 354, 51 N.E.2d at 287; Cope v. United States Fuel Co., 229 Ill. App. at 253.
122. Consider the Mason court's following analysis of a waiver clause:

By the language of the deed in question the damages waived and released are 'any' and 'all' claims for damage and 'all' liability by reason of damage either to 'persons or property' in 'any' way caused at 'any' time 'directly or indirectly' by the mining or removing of coal from plaintiff's premises or by the enjoyment of 'any' of the rights and privileges granted by the deed. Such language is plain and unambiguous. It is *comprehensive* and *all-inclusive* in its reference to possible claims for damages. Instead of specifying particular damages and injuries, it purports to give a *general* release of 'all' claims, and the *general* character of the language used is not in any way qualified or restricted by any other language. In our opinion, the [subsidence] damages set forth in the plaintiff's complaint are clearly damages to property caused either directly or indirectly by the mining and removal of coal under plaintiff's premises.

320 Ill. App. at 353, 51 N.E.2d at 287 (emphasis added). *See also* Corcoran v. Franklin County Coal Co., 249 Ill. App. at 552. The court stated that a clause that reserved to the defendant the right to mine coal under a certain lot but stated that the defendant was not "responsible for any damages that may occur while removing said coal or after the same has been removed" was "broad enough" to exculpate the defendant from liability for damages from surface subsidence.

123. Wesley v. Chicago, Wilmington & Franklin Coal Co., 221 Ill. App. at 432.
124. *Id.* at 433-34.

125. *Id.* The Wesley court relied on decisions from three other jurisdictions for its conclusion that a waiver clause is not against public policy. Scranton v. Phillips, 94 Pa. 15 (1880), was the first case cited that developed this argument. In Scranton, the court stated:

[It was agreed, the owner of the mine, his heirs and assigns, should be exempt from . . . liability [for subsidence damage]. . . . We see no reason why a person shall not be bound by his agreement to exempt another from liability for damages in working a coal mine. . . . No rule or policy of law forbids it. The undoubted intention of the parties to the contract was that [the defendant] might mine and remove the coal without any obligation to support the surface or liability in case it fell in.]

*Id.* at 22. The Scranton public policy argument was adopted in two other cases cited in Wesley: Paull v. Island Coal Co., 44 Ind. App. at 224, 88 N.E. at 961 (the contract is the law between the parties when its language is clear and unambiguous); Godfrey v. Weyanoke Coal & Coke Co., 82 W. Va. at 668, 97 S.E. at 188 (no case denies parties the right to contract provisions
An unsettled question is whether, or to what extent, an otherwise effective waiver clause will exculpate a mineral owner from liability for subsidence damage that results from negligent coal mining. One district of the Illinois Appellate Court has decided that a mineral owner cannot be liable on a negligence theory for subsidence that results from removing all of the coal where the deed specifically gave the right to mine and remove all of the underlying coal and the waiver clause released the miner from all liability for surface damage. The court stated that the mineral owner cannot be guilty of negligence in this situation because he or she is only recovering his or her property. The court failed to consider, however, whether total coal removal would have been possible without causing subsidence. The court would have been wiser to consult the rationale of other jurisdictions that have held that when it is economically and technologically feasible to remove the coal without causing subsidence, failure to do so constitutes negligence. On the other hand, if the coal cannot be removed without causing subsidence, then the exculpatory clause will allow liability-free removal.

Still undecided in Illinois is whether a waiver clause that releases the mineral owner from liability for surface damage without simultaneously giving the express right to mine all the coal will exonerate the owner from liability for subsidence resulting from negligent removal of all the coal. This is an area where the Illinois courts could apply a strict construction of waiver clauses in order to benefit the surface owner, and thereby return to some extent to the approach of the earlier Illinois cases. Although court decisions generally have favored the coal developer to the exclusion of the sur-

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126. Cope v. United States Fuel Co., 229 Ill. App. 243 (3d Dist. 1923). The waiver clause in Cope stated that the grantee had "the right to mine and remove all of said vein of coal and that he shall not be liable for any damage done to the surface of land in so doing." Id. at 244. The plaintiffs charged that the grantee had "negligently, wilfully, wrongfully and improperly mined and removed" all of the coal under their land and thereby negligently and wrongfully failed to guard the plaintiffs' land against subsidence. Id. at 245. The court failed to find the grantee guilty of a negligent act. Id. at 253.

127. Id. at 253.

128. See, e.g., Livingston v. Moingona Coal Co., 49 Iowa 369 (1878). Livingston involved a deed that gave the defendant the "right to mine, and obtain and remove the [coal], by such means as they deem proper, without thereby incurring, in any event whatever, any liability for injury caused for damage done to the surface of the land in working [the] coal . . . . " Id. at 370. The court held that the defendant was bound to exercise ordinary care when mining, and if such care required that pillars of coal or artificial supports be left in order to protect the surface owner's property, then their removal would constitute negligence and the mineral owner would be liable for any resulting damage. Id. at 371-72. See also Western Ind. Coal Co. v. Brown, 36 Ind. App. 44, 74 N.E. 1027 (1905). The deed gave the defendant the "right to mine the coal from under said real estate without any liability for damages to said surface." Id. at 48, 74 N.E.2d at 1029. The Brown court stated that even though there was an "express stipulation that there should be no liability, the same would not relieve the [defendant] from the liability for injury caused by [his] own negligence." Id. at 50, 74 N.E. at 1029.

129. One area of the law where courts have had an opportunity to consider waiving liability for negligence is that of bailment. A recent summary concluded:
face owner and have interpreted waiver clauses presumptively to the developer's advantage, even those decisions would concur with the earlier cases that refused to enforce a waiver clause against a surface owner who was not a party to the clause.\footnote{130}

In considering the more recent pro-waiver posture of the Illinois courts, it should be noted that the most recent case was decided in 1943,\footnote{131} that all of the decisions are from the appellate courts,\footnote{132} that the matter never has been considered by the Illinois Supreme Court except in Wilms, which was an opinion typifying the strict construction approach,\footnote{133} and that the public policy arguments were decided in the early 1920's before public concern for subsidence had manifested itself.\footnote{134} Perhaps the time has come for the Illinois Supreme Court to undertake a close review of the waiver clauses. Even if the court is not willing to consider the public policy arguments against waiver clauses, it should at least closely scrutinize the negligence

\footnote{130}{While the right of an ordinary bailee to contract to exempt himself from liability for his own negligence or that of his employees is generally recognized, there is a strong tendency, particularly in the recent decisions, to hold stipulations of this kind void as violating public policy, in contracts for hire entered into by bailees in the course of general dealings with the public. 8 AM. JUR. 2d Bailments § 128 (1963). The rule regarding the ordinary bailee "is applied with practical unanimity where the public neither has nor could have any interest whatsoever in the subject matter of the contract . . . ." Id. § 130. However, even this rule "does not apply when it will operate to relieve a party from liability arising out of his own fraud or want of good faith, or, according to some authorities, from the consequences of his gross negligence." Id. It is not necessary to look further than the recent headlines and the recent legislation to see a demonstration of public interest in subsidence problems. It exists in the concern for expending public funds to repair or replace roads and public buildings that have been damaged due to subsidence, in the concern for the large amount of unusable land, and in the concern for the general economic loss that occurs when a substantial amount of private property is damaged. See note 4 supra.}


\footnote{132}{See notes 108-130 and accompanying text supra.}

\footnote{133}{See notes 98-103 supra.}

\footnote{134}{Public concern for subsidence is a recent phenomenon. See note 4 supra.}
argument and should return the courts to the strict construction espoused by the early cases. This return should be for one basic reason, if for no other, and that reason concerns the matter of notice to the surface purchaser. When a deed clause reads “without any liability for surface subsidence occasioned thereby” it should be clear to any surface purchaser what is intended. Anything less, however, presents ambiguity as to whether subsidence damage was even contemplated by the parties. In the area of waiver clause interpretation, the Illinois courts have deviated the most from the Wilms general approach of recognizing the right to subjacent support as an important substantive right entitled to protection in the courts.

Remedies

Although there is considerable authority relating to damages awards in subsidence cases, there is very little authority relating to injunctions enjoining the removal of subjacent support. It appears, however, that in some cases the complainant would have either a choice of the two remedies, or would be able to get both damages for past subsidence and injunctive relief to protect against future subsidence.

1. Damages

The Illinois courts have held that plaintiffs can allege and prove damages only for past subsidence, not for future subsidence.\footnote{135} Two justifications have been given for this result. First, according to legal theory in Illinois, the cause of action does not accrue until the subsidence occurs.\footnote{136} Second, as a general rule, future damages are not awarded unless the injury is certain, permanent, and necessarily continues to produce a loss.\footnote{137} Because “the taking out of coal without leaving a sufficient support may or may not cause injuries thereto in the future . . . the damages should be confined to such as have occurred before suit is brought.”\footnote{138} Thus, plaintiffs are left with the right to sue for actual damages “from time to time as the damages are sus-

\footnote{135. Catlin Coal Co. v. Lloyd, 109 Ill. App. 122, 125-26 (3d Dist. 1903). The reversible error occurred when the trial court instructed the jury to allow damages for “such subsidence of the surface of the land as had occurred at the time this suit was commenced, and which would occur thereafter.” 109 Ill. App. at 125. The court stated that “[f]or the damages occasioned from subsidence of such parts of the land as had taken place at the time this suit was commenced, the appellee could in his action, recover, but not for such as might thereafter occur.” Id.}

\footnote{136. See also Richards v. Gundlach, 245 Ill. App. 264, 266 (4th Dist. 1924), where the court found that “it was error to admit evidence of injuries sustained after the filing of said suit,” but affirmed the judgment against the coal company for surface subsidence. But see Grese v. Donk Bros. Coal & Coke Co., 147 Ill. App. 284, 285 (4th Dist. 1909) (the jury was allowed to consider testimony regarding future subsidence because the parties stipulated that the plaintiff should recover both future and past damages).}

\footnote{137. Richards v. Gundlach, 245 Ill. App. at 266.}

\footnote{138. Id.}
tained." In a successive suit, the plaintiff can recover "such damages as he has sustained prior to its commencement, not barred by a previous recovery." In addition, tenants from year to year are limited to recovering the damages that occur to crops in the year when the subsidence takes place. Thus, if a tenant renews the lease with knowledge of a past subsidence and the subsidence area later fills up with water and ruins the new crops, he or she cannot recover.

The amount of damages awarded depends upon the nature of the injury. If the injury is to land, the measure of damages is the difference between the market value of the land before and after the subsidence. Relying upon this measure of damages, the court in *Penn v. Taylor* held that it was error to instruct the jury that no damages resulted if the plaintiff could rent his land after subsidence for as much as he had rented it before the subsidence and that he could sell it for as much money as he had paid for it. Reimbursement for money expended is not a sufficient measure of loss.

A different damages formula is used when the injury is to buildings and other improvements on the surface. In such cases, "the cost of repair or of restoring the premises to their original condition is the true and better rule to apply." This formula has been justified on the basis that, without it, plaintiffs could not recover for minor damages such as broken windows. The rule also has been justified on the basis that the market value of property depends on the condition of the buildings, and the cost of restoring them to their original state is the best evidence of their pre-injury condition. Perhaps the courts are trying to formulate damages measurement

139. Morriss v. Saline County Coal Co., 211 Ill. App. at 186-87 (affirmed judgment against coal company for damages to surface estate).
140. Id.
142. Id.
143. Richards v. Gundlach, 245 Ill. App. 264 (4th Dist. 1924). In this case, the court rejected the cost of restoring the premises to the condition they were in before the injury occurred as the measure of damages. Id. at 267. The court then adopted the market value rule and, in explanation, stated that the cases involving the cost of repair rule dealt with claims of damage to buildings and that damage formulas "should be adopted which will be most beneficial to the injured party, as he is entitled to the benefit of the premises intact." Id. at 267. The court, however, affirmed the judgment against the coal company despite evidence admitted regarding the price to fill in cracks on the surface and to restore the land. Id. at 269.
144. 24 Ill. App. 292, 293 (4th Dist. 1887) (reversed and remanded for judgment for the coal company).
145. Id.
147. Donk Bros. Coal & Coke Co. v. Slata, 133 Ill. App. at 283. This formula was followed in two prior cases where the Illinois Supreme Court affirmed judgments against tunnel contractors whose use of dynamite caused damage to buildings on the surface. See Chicago v. Murdoch, 212 Ill. 9, 72 N.E. 46 (1904); FitzSimons Connell Co. v. Braun & Fitts, 199 Ill. 390, 65 N.E. 249 (1902).
rules that are the "most beneficial to the injured party." 149

Several Illinois court opinions have been concerned with evidentiary problems relating to the proof of damages. Appeals challenging the sufficiency of the evidence to satisfy a preponderance of the evidence test have resulted in sustained verdicts, 150 remittiturs, 151 and reversals. 152 Other cases concerned with evidentiary problems have dealt with the role of the jury in the determination of damages. Where the jury has been allowed to view the premises involved, the court has held that such a viewing was only for the purpose of understanding the facts of the case and not for the purpose of exercising judgment as to damages. 153 Also, where the jurors have been instructed that they could use their own knowledge and experience as to the amount of damages, the appellate court has held that an error has been committed. 154 Despite cases in which appeals have failed because of evidentiary problems and reversals have resulted due to consideration of future damages, the awarding of damages in subsidence cases is consistent with the general Illinois approach of recognizing the right to subjacent support as an important substantive right that is entitled to substantial protection in the courts.

2. Injunctive Relief

Only two Illinois subsidence cases have considered the question of injunctive relief. The Illinois Supreme Court was the first court to consider this question in 1904 in Lloyd v. Catlin Coal Co. 155 To prevent further subsidence to his property, the plaintiff in Lloyd sought injunctions either to enjoin the defendant from any mining, or to direct the manner in which the defendant removed the coal. 156 The supreme court denied the suit for injunctive relief because the plaintiff had an adequate remedy at law to recover for each instance of damage, 157 and because the damage was not ir-

149. Id. The Donk court stated that "[t]he valuation should be adopted which will be most beneficial to the injured party, for he is entitled to the benefit of the premises intact and to the value of any part separated." Id. See also Hurst v. Sholl, 232 Ill. App. at 183; Donk Bros. Coal & Coke Co. v. Slaia, 133 Ill. App. at 284.


155. 210 Ill. 460, 71 N.E. 335 (1904).

156. Id. at 462, 71 N.E. at 336.

157. Catlin Coal Co. v. Lloyd, 109 Ill. App. 122, 125 (3d Dist. 1902) ($6000 award was reversed and remanded because it was based in part on the prospect of future subsidence).
reparable\textsuperscript{158} inasmuch as the plaintiff could be compensated adequately in assessable damages.\textsuperscript{159} However, although the court did mention the defendant’s financial capability to respond in damages,\textsuperscript{160} it failed to consider whether the defendant would be around to respond in damages fifteen or twenty years later when subsidence might occur as a result of present mining practices. The court also noted that because there was no certainty as to further subsidence,\textsuperscript{161} granting an injunction would cause more harm to the defendant than benefit to the plaintiff.

The court seemed most concerned with identifying the conduct that would have to be enjoined.\textsuperscript{162} Practical considerations suggest that the court’s issuance of such an injunction would require it to choose among mining practices and, perhaps even to supervise the mining activity.\textsuperscript{163} The court distinguished those cases in which injunctions had been issued where the defendants had no right to mine at all\textsuperscript{164} and where the plaintiffs indicated specific wrongful acts, such as robbing pillars.\textsuperscript{165} Neither type of case involved the supervision problem posed in \textit{Lloyd}.

While injunctive relief was found to be inappropriate on the facts in \textit{Lloyd}, the court did set forth three conditions that must be satisfied before such relief will be granted: (1) inadequacy of the remedy at law; (2) likelihood of future subsidence; and (3) practicality of supervision of the order.\textsuperscript{166} Because the Illinois courts consistently have viewed the prospect of future subsidence as uncertain,\textsuperscript{167} the necessity of satisfying the “likelihood”

\begin{footnotesize}
\textsuperscript{158} The court stated: \\
\[\text{An injury is irreparable either from its own nature, as when the party injured cannot be adequately compensated therefor in damages, or when the damages which may result therefrom cannot be measured by any certain pecuniary standard, or when it is shown the party who must respond is insolvent, and for that reason incapable of responding in damages.}\]
\textsuperscript{210} Ill. at 464, 71 N.E. at 337, quoting 16 Am. & Eng. Encycol. of Law 361 (2d ed. 1896).

\textsuperscript{159} The \textit{Lloyd} court stated that “[t]he uses . . . are not exceptional or unusual, but like that of ordinary farm lands, . . . it could hardly be . . . that a slight subsidence of the soil of a farm could not be compensated.” \textsuperscript{210} Ill. at 465, 71 N.E. at 337. The court, however, further stated that “[i]n a city where the use of the land is mainly for the support of buildings . . . [subsidence] would doubtless work such irreparable injury as would be stayed by injunction.” \textit{Id}.

\textsuperscript{160} \textit{Id}.

\textsuperscript{161} \textit{Id} at 470, 71 N.E. at 339.

\textsuperscript{162} \textit{Id} at 469, 71 N.E. at 338-39.

\textsuperscript{163} \textit{Id} at 470, 71 N.E. at 339. The court concluded:

What amount of coal must be left is a question of fact which must be ever difficult of determination, and can be best dealt with by those acquainted with the science of mining, as the work progresses. It is largely a question of engineering, and courts will encounter great difficulty in assuming, and will only in rare cases, where the remedy at law is so inadequate as to render such course necessary, assume, charge of the operation of such work and direct the manner in which it shall be done.

\textit{Id}.

\textsuperscript{164} \textit{Id} at 468-69, 71 N.E. at 338.

\textsuperscript{165} \textit{Id} at 469, 71 N.E. at 338. The court’s example was Thomas Iron Co. v. Allentown Mining Co., 28 N.J. Eq. 77 (1877).

\textsuperscript{166} \textit{210} Ill. at 465-67, 71 N.E. at 337-38.

\textsuperscript{167} See notes 135-38 and accompanying text supra.
\end{footnotesize}
element as a pre-condition might well render injunctive relief an unrealistic alternative in subsidence cases.

The question of injunctive relief in an Illinois subsidence case was considered again by a federal district court in 1918 in Marquette Cement Mining Co. v. Oglesby Coal Co. The court in Marquette, however, not only found that subsidence had occurred, but also that further subsidence would occur. The remedy at law was inadequate due to the irreparable harm the plaintiff would suffer. Unlike Lloyd, the plaintiff's use of the land in Marquette was unique because it was operating a cement mine in an underground stratum above the defendant's operation. This type of operation made it difficult to assess damages and to assure the plaintiff adequate compensation. The court also found that a balancing of interests favored the plaintiff even though it meant closing the defendant's coal mine for many years. Because the conditions set forth in Lloyd were met the court granted the injunction.

Although the Marquette decree was framed so that the defendant was enjoined from mining "in such a manner as to cause or allow any part of the . . . property . . . to subside by reason of the withdrawal of the coal" and from extracting coal "without leaving and providing adequate support which will at all times prevent the soil and property . . . from subsiding, and also from impairing the natural support which said coal furnishes to the said land . . . " the practical effect of such an injunction might be to stop the mining since there is no sure way of leaving "adequate" support other than by not mining. Cessation of mining, therefore, would eliminate the supervi-

168. 253 F. 107 (N.D. Ill. 1918).
169. Id. at 116. The court found "that the continuance of coal mining will vitally injure territory in which the mine practice is good and sufficient." Id.
170. Id. at 117-120.
171. Id. at 119. The court stated that any injunction "should not be granted except in a clear case. . . . But when it is clear that subsidence will seriously impair the mining use, the injury is irreparable, and should be restrained." Id.
172. Id. at 117. The court analogized to an oil case, Texas Co. v. Central Fuel Oil Co., 194 F. 1 (8th Cir. 1912), and stated:

Equity jurisdiction was sustained, because plaintiff could not recover all the damages it might sustain, and because they were impossible of proof, the amount of oil which the defendant could produce being uncertain. So in this present case no one can tell what damage the cement company may sustain by future subsidence. Future actions at law would be necessary as the injury progressed. Recurring suits for damages would be more vexatious and expensive than effective.

253 F. at 117.

173. 253 F. at 120. According to the Marquette Cement court, "[w]hen each party is pursuing his own rights and collision results, the one without legal culpability of any kind must prevail, if the other occupies legally indefensible ground." Id. The court seemed to desire to balance the conduct of the parties rather than the extent of harm or benefit from granting or denying the injunction, although the facts would appear to favor plaintiff on the latter balancing as well. Id. at 119.
174. Id. at 122.
175. Id.
sion problem for the court, but may result in an undue burden on the defendant.

Probably the best answer is a compromise between the Illinois Supreme Court's approach and that of the federal district court. Thus, the court neither would reject supervision as in *Lloyd* nor give the type of blanket order resulting in closure as in *Marquette*. Rather, the court would listen to testimony regarding specific steps that might feasibly be taken to protect the surface against subsidence and then decree that those steps be taken. This would give substantial protection to the plaintiff without placing an undue burden on the defendant. While judicial involvement in technological matters through the issuance of injunctive relief may have been novel and discouraged in the pre-1920 period, it is now a commonplace occurrence.\(^{176}\)

**Proof of Subsidence**

A plaintiff frequently encounters problems of proof even when a cause of action exists and there is a viable defendant. The plaintiff must prove: (1) that the support for the surface has been withdrawn; (2) that the defendant is responsible for the withdrawal of support; (3) that there has been surface subsidence as a result of the withdrawal; and (4) that plaintiff has been damaged by the subsidence.\(^{177}\) The *Wilms* court, which first articulated the concept of a *prima facie* subsidence case, stated that "(t)he act of removing all support from the superincumbent soil is, *prima facie* the cause of its subsequently subsiding . . . ".\(^{178}\) This concept has been applied in several later Illinois cases.\(^{179}\)

For example, in *Savant v. Superior Coal Co.*,\(^{180}\) the court found that the coal had been removed from beneath the premises in question over twenty years before the subsidence occurred. The plaintiff offered proof of subsidence and of the extensive damage to his house, lot, and adjacent property. The *Savant* court considered this proof sufficient to establish a *prima facie* case of subsidence resulting from the removal of coal.\(^{181}\) The defendant attempted to rebut the plaintiff's case by offering evidence that the subsidence involved was "not typical of a coal mining subsidence,"\(^{182}\) and that the damage to the house may have been caused by the settling of the chim-


\(^{177}\) Wilms v. Jess, 94 Ill. 466-67.

\(^{178}\) Id. at 466-67.

\(^{179}\) See, e.g., Standard Oil Co. v. Watts, 17 F.2d 981, 982 (7th Cir. 1927); Tankersley v. Peabody Coal Co., 31 Ill. 2d at 505, 202 N.E.2d at 503; Marchetti v. Lumaghi Coal Co., 13 Ill. App. 2d at 529, 142 N.E.2d at 816; Savant v. Superior Coal Co., 5 Ill. App. 2d at 119, 125 N.E.2d at 153.

\(^{180}\) 5 Ill. App. 2d 109, 125 N.E.2d 148 (3d Dist. 1955).

\(^{181}\) Id. at 119, 125 N.E.2d at 153.

\(^{182}\) Id. at 119-20, 125 N.E.2d at 153.
ney. Although this conflicting evidence raised a question for the jury, the verdict in favor of the plaintiff was sustained.

The Wilms rule received an expansive application from the Seventh Circuit Court of Appeals in Standard Oil Co. v. Watts. In Watts, the plaintiff introduced a mining map as evidence that the defendant had mined beneath the plaintiff’s surface. The court concluded that this map was satisfactory evidence of the defendant’s mining activities. The court then considered the extent to which the plaintiff could rely upon the map to show that subsidence had occurred as a result of the defendant’s mining. Although the court recognized that plaintiffs in earlier Illinois cases had presented some other evidence of causation in addition to the mere fact that the coal had been removed, it decided that it is not unreasonable to conclude that surface subsidence that follows the removal of subjacent coal has been caused by such removal where no other evidence of any other cause of subsidence has been presented. The court pointed out that because it was

183. Id. at 120, 125 N.E.2d at 153.
184. Defendant offered no evidence as to damage to the sewer or as to subsidence of the back yard. Id.
185. Id. For another jury case where the verdict in favor of the plaintiff was sustained, see Marchetti v. Lumaghi Coal Co., 13 Ill. App. 2d 526, 142 N.E.2d 815 (4th Dist. 1957). The Marchetti court reasoned as follows:

In the action before us there was evidence that the land owned by plaintiff was improved. . . . After July 1, 1954 a large crack appeared in the ground, entering plaintiff’s land one corner, running through the buildings and emerging on the far side of the buildings, continuing to the far side of plaintiff’s property where it abuts the township road. At the same time damage to foundations, floors, walls, and to plumbing was noted in the improvements on the land.

There was also evidence that similar cracks have appeared in other subsidence cases and that where water has been introduced on fire clay at the bottom of a coal mine with sinking of the stratum, cracks on the surface causing damage to buildings resting on the surface can result. There was evidence that while defendant had not removed coal from under the premises in question for many years, defendant had, over a period of years prior to the damage, introduced large quantities of water (about 200 gallons of water per minute for fourteen hours a day, for two hundred days a year) into the mining shaft of defendant less than a thousand feet from plaintiff’s premises.

While there was substantial contradictory evidence, under the facts, it would have been error for the Trial Court to direct a verdict and its refusal to direct such verdict was proper.

186. 17 F.2d 981 (7th Cir. 1927). Standard Oil has been cited with approval in Tankersley v. Peabody Coal Co., 31 Ill. App. 2d 505, 202 N.E.2d at 503, and Marchetti v. Lumaghi Coal Co., 13 Ill. App. 2d at 528, 142 N.E.2d at 816.
187. 17 F.2d at 981. State law requires coal developers to prepare and file maps. See notes 68-70 and accompanying text supra.
188. 17 F.2d at 982.
189. Id.
190. Id. The court stated that this is the conclusion required by "the law of gravity." Id.
the defendant’s mine, the defendant can most appropriately testify as to the causal relation between the mining and the subsidence.\textsuperscript{191}

Establishment of a \textit{prima facie} case based merely on the defendant’s removal of coal, therefore, will be sufficient to recover damages if the defendant offers no rebuttal evidence. If such rebuttal evidence is offered, however, a jury question results that could place a burden on the plaintiff to produce additional evidence. In either situation, a proof standard is established recognizing the plaintiff’s enforceable right to subjacent support.

**ILLINOIS LEGISLATION**

Since 1975, the Illinois General Assembly has approved six acts that could relate to surface subsidence caused by underground coal mines. These acts deal specifically with abandoned mines,\textsuperscript{192} insurance,\textsuperscript{193} research,\textsuperscript{194} and future mining activities.\textsuperscript{195} Two of the acts\textsuperscript{196} focus on compliance with requirements of the federal Surface Mining and Control Reclamation Act of 1977.\textsuperscript{197}

**Abandoned Mines**

The first Illinois legislation that can be interpreted as dealing with subsidence problems was the 1975 Abandoned Mined Lands Reclamation Act.\textsuperscript{198} It established an Abandoned Mined Lands Reclamation Council,\textsuperscript{199} charged principally with the mission to acquire, reclaim, and dispose of abandoned mined lands.\textsuperscript{200} The 1979 Abandoned Mined Lands and Waters Reclamation Act,\textsuperscript{201} effective June 1, 1980, repealed the 1975 Act.\textsuperscript{202} Despite repeal and the fact that the 1979 Act contains many new provisions, the Abandoned Mined Lands Reclamation Council created by the

\textsuperscript{191}. Id.
\textsuperscript{192}. ILL. REV. STAT. ch. 96 1/2, §§ 3404-3405 (1977); Abandoned Mined Lands Reclamation Act, ILL. REV. STAT. ch. 96 1/2, §§ 4601-4615 (1977); The Abandoned Mined Lands and Waters Reclamation Act, P.A. 81-1020, 1979 Ill. Legis. Serv. 2663 (West).
\textsuperscript{193}. ILL. REV. STAT. ch. 73, §§ 1065.401-.414 (Supp. 1978), as amended by P.A. 81-1178 (Nov. 29, 1979).
\textsuperscript{195}. The Surface Coal Mining Land Conservation and Reclamation Act, P.A. 81-1015, 1979 Ill. Legis. Serv. 2625 (West).
\textsuperscript{196}. Id. See also The Abandoned Mined Lands and Waters Reclamation Act, P.A. 81-1020, 1979 Ill. Legis. Serv. 2663 (West).
\textsuperscript{198}. ILL. REV. STAT. ch. 96 1/2, §§ 4601-4615 (1977).
\textsuperscript{199}. Id. § 4604. The Council is "comprised of: (a) Director of Mines and Minerals, (b) Director of Conservation, (c) Director of Agriculture, (d) Director of Business and Economic Development, (e) Director of Local Government Affairs, (f) Director for the Environmental Protection Agency, and (g) Director of the Illinois Institute of Environmental Quality, or their designates." The Chairman of the Council is the Lieutenant Governor, or his designate. Id.
\textsuperscript{200}. Id. § 4605.
\textsuperscript{201}. P.A. 81-1020, 1979 Ill. Legis. Serv. 2663 (West).
\textsuperscript{202}. Id. § 3.07-08.
1975 Act remains essentially the same, and the six priorities for action established through Council rulemaking pursuant to the 1975 Act are incorporated into the new law. Consequently, some of the experiences encountered under the old law will be relevant under the new law, and the importance of the 1975 Act is of more than historical interest.

While the principal focus of the acts appears to be on the reclamation of surface mined land, the language in both acts also applies to surface effects of underground mining. For example, the 1975 Act's definitions of "abandoned lands" and "mined land" specifically refer to "land affected by... underground mining." Because subsidence is an "effect" of underground mining, this language leads to an argument that the Act impliedly confers authority to deal with subsidence. The definition of land affected by underground mining, however, does not mention subsidence; rather, it focuses on refuse, haul roads, drainage ditches, equipment storage areas, and processing areas. This gives substance to an argument that while the Illinois General Assembly intended to grant authority to deal with some surface effects of underground mining, it did not intend to deal with subsidence. Furthermore, under the 1975 Act the only abandoned land that qualified for remedial action by the Council was land that was affected before January 1, 1962, and that was "neither being mined nor applied to any other commercial purpose or for which taxes are in default" as of the effective date of the Act, July 1, 1975. The January 1, 1962, cut-off date makes some sense in the context of surface mining inasmuch as that was the effective date of Illinois' first surface mining reclamation act. The date makes no sense, however, in the context of the surface effects of underground mining and thus further emphasizes that the real impact of the 1975 Act was intended to be upon abandoned surface mines rather than abandoned underground mines.

203. The 1979 Act adds the Executive Director of the Capital Development Board to the list of members established by the 1975 Act. Id. § 1.04. The Director of the defunct Illinois Institute for Environmental Quality is replaced by the Director of its successor, the Illinois Institute of Natural Resources. Id. See ILL. REV. STAT. ch. 96 1/2, §§ 7401-7404 (Supp. 1978).


205. P.A. 81-1020, § 2.03(a), 1979 Ill. Legis. Serv. 2665 (West).

206. ILL. REV. STAT. ch. 96 1/2, § 4603(a) and (e) (1977).

207. Land affected by underground coal mining is defined as:

land on which shafts, tunnels, or adits have been excavated for the mining of coal,
any land on which refuse from underground mining is deposited, haulage road,
drainage ditches, equipment storage areas, and all land or property of the processing plant and all areas adjacent thereto and affected by the processing that contribute directly or indirectly to the mining or handling of coal.

Id. § 4603(i).

208. Id. § 4603(a).

209. ILL. REV. STAT. ch. 93, §§ 180.1-13 (1963) (repealed 1971). The 1943 Act, ILL. REV. STAT. ch. 93, §§ 162-180 (1943), was declared unconstitutional in Northern Ill. Coal Corp. v. Medill, 397 Ill. 98, 72 N.E.2d 844 (1947), and was repealed by Act of July 1, 1949, 1949 Ill. Laws 1588.
In contrast, the 1979 Act applies to any land and water which were mined for coal or which were affected by such mining, wastebanks, coal processing, or other coal mining processes, and abandoned 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. 210

The cut-off date for action by the Council under the 1979 Act is August 3, 1977, which is the effective date of the federal Surface Mining Control and Reclamation Act of 1977. 211 Because the subsidence provisions of the federal act relating to future mining were not fully operative as of August 3, this is not the most desirable date for purposes of determining the Council’s authority for dealing with potential subsidence problems, 212 but it is a considerable improvement over the cut-off date in the 1975 Act. While the 1979 Act does not refer specifically to subsidence, neither does it focus solely on surface impacts of underground mining that are unrelated to subsidence, as was the case under the 1975 Act. 213 Still, there are difficulties in interpreting the scope of the 1979 Act. For example, the Act focuses on reclaiming abandoned land. It is therefore difficult to categorize repair to a $75,000 home that has subsided as a reclamation of abandoned land within the scope of the 1979 Act, despite the fact that abandoned land also includes land “left in an inadequate reclamation status,” 214 and reclamation is defined to include “restoration of . . . land . . . to constructive uses, including . . . residential . . . sites, and abatement, control or prevention of adverse effects of coal mining.” 215 Though close reading of this language suggests authority to fill sinks and cracks in the surface, to repair access, to fill mine voids, and perhaps even to shore up individual houses to prevent further damage, it does not suggest the authority to repair damage to an individual house. Thus, the conclusion remains that the principal surface effects of under-

212. Because August 3, 1977, is the date used in Title IV of the federal Surface Mining Control and Reclamation Act of 1977 as the cut-off date for determining eligibility of lands for reclamation with federal funding, 30 U.S.C. § 1234 (Supp. I 1977), the state really did not have much choice. See text accompanying notes 243-45 infra.
213. The Act gives the Council specific authority to provide “by rule for the filling of voids and sealing of tunnels, shafts and entryways, and reclamation of the surface impacts of underground or surface mines.” P.A. 81-1020, § 2.02(b), 1979 Ill. Legis. Serv. 2664 (West). One of the phrases used throughout the Act to describe the scope of activity of the council is “restore, reclaim, abate, control, or prevent” adverse effects of past coal mining practices. Id. §§ 2.04(a)(2), 2.04(a)(4), 2.04(b), 2.09(a), .10, 1979 Ill. Legis. Serv. at 2665, 2667-68. In addition, “reclamation” is defined as “the restoration of abandoned lands and waters to constructive uses, including, but not limited to forests, grasses and legumes, row crops, wildlife and aquatic reserves and recreational, residential and industrial sites, and abatement, control or prevention of adverse effects of coal mining.” Id. § 1.03(a)(7), 1979 Ill. Legis. Serv. at 2663.
214. Id. § 1.03(a)(1), 1979 Ill. Legis. Serv. at 2663.
215. Id. § 1.03(a)(7), 1979 Ill. Legis. Serv. at 2663.
ground mining contemplated by the 1979 Act are those associated with refuse disposal.

In addition to the definitional problems under the 1975 Act, the entire scheme of that Act militates against interpreting it to deal with subsidence problems. The Act requires the state to "acquire" title to any land that the Council intends to reclaim and, upon completion of the project, to retain the title, transfer it to some other public entity, or sell it. This acquisition aspect of the 1975 Act is not consistent with the development of a mine subsidence reclamation project in an area where, for example, private homes have been damaged by subsidence. It is impractical for the Council to "acquire" the homes and then repair and resell them. Therefore, it cannot be argued that the General Assembly contemplated such an acquisition and resale program for private homes. Nor is it likely that owners of homes that have been "affected" by mining would be in default on their property taxes, which is the only way non-commercial land is eligible for reclamation.

Thus, both the definitions and the scheme of the 1975 Act appear to contemplate dealing with unused areas of surface lands. While it is possible that open tracts of surface land exist where sinks and cracks have developed due to subsidence and could be acquired and reclaimed, it is unlikely that such tracts would meet the cut-off date, lack of commercial use, or tax default tests of the 1975 Act.

On the other hand, the 1979 Act expressly equips the Council with authority to reclaim privately owned land and to make such land bear the

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216. ILL. REV. STAT. ch. 96 1/2, §§ 4605, 4610 (1977). A question arises as to whether the state needs to acquire the full fee simple title or whether some lesser interest such as a life estate or leasehold would be sufficient. Although it might be argued that the Illinois Attorney General ruled the full fee title is required in Op. Ill. Atty. Gen. (April 7, 1978), this ruling is more properly interpreted as only stating that a leasehold from a local government unit is not sufficient under the statutory scheme in cases where the unit would retain a reversionary interest. The opinion points out that the statute contemplates transferring reclaimed land to local government units only if the unit in question prepares and submits a land use plan to the Council. In the attorney general's opinion, this condition could be circumvented if the local government unit can obtain possession of the land via the reversionary interest. Id. Such an argument does not arise when the leasehold is obtained from a fee owner other than a local government. It can be argued that the "acquisition" requirement is designed to give the Council a sufficient right to enter upon and reclaim the premises, and its scope should be examined from that standpoint. On the other hand, it can be argued that the authority given to purchase less than fee interests is such that in instances where the Council already owns the fee it can, for example, acquire an outstanding easement whose existence might otherwise impede an effective reclamation program. ILL. REV. STAT. ch. 96 1/2, § 4610 (1977). Thus, the specific authority to acquire less than a fee interest is not necessarily a statement that ownership of less than a fee will be sufficient to allow the Council to proceed with a reclamation project.

217. ILL. REV. STAT. ch. 96 1/2, § 4614 (1977).

218. It may be profitable to examine the program established under Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. § 1237(h) (Supp. 1 1977).

219. ILL. REV. STAT. ch. 96 1/2, § 4614 (1977).

220. Id.

221. P.A. 81-1020, § 2.04, 1979 Ill. Legis. Serv. at 2665 (West).
burden of the increase in value attributable to the reclamation. In general, under the 1979 Act the Department of Mines and Minerals is to administer a reclamation program under the direction of the Council. More specifically, the Council must designate the abandoned lands to be reclaimed, determine which of those lands are to be acquired, and establish by rule the criteria for making these reclamation and acquisition decisions. The Council also must determine the manner of reclamation and the uses to which the land will be put after reclamation. In addition to the foregoing mandatory duties, the Council "may" provide for "the filling of voids and sealing of tunnels, shafts and entryways and reclamation of the surface impacts of underground or surface mines," and it "may" develop criteria for project evaluation that goes beyond the priorities set out in the statute.

Despite the new Act's greater specification of Council duties, the old Act's Council Program Review and Planning Document could serve as the framework for accomplishing both the mandates and the discretionary duties of the 1979 Act. This document and the regulations promulgated thereunder provide a list of priorities and weighted values that enable the Council to evaluate potential projects in order to decide which ones to undertake. These priorities have been incorporated into the 1979 Act. Priority I is the "[p]rotection of public health, safety, and the general welfare from extreme danger resulting from the adverse effects of mining practices." This priority guideline includes a nonexclusive list of ten conditions that can result in "extreme danger," such as "[e]xtreme contamination of a drinking water supply." A maximum of 500 points can be assigned to these conditions in calculating a project's priority. The lower priority conditions are

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222. Id. §§ 2.04(c), 2.09(a), 1979 Ill. Legis. Serv. at 2666-67. While § 2.04(c) states broadly that "moneys expended for such work and the benefits accruing to any such premises... shall be chargeable against such land," § 2.09(a) makes it clear that any lien against the property to recoup such expenditures is not to exceed the increase in market value of property. The Act also establishes how this increase is to be determined and sets up a protest procedure.

223. Id. § 1.05, 1979 Ill. Legis. Serv. at 2664.

224. Id. § 2.01, 1979 Ill. Legis. Serv. at 2664.

225. Id.

226. Id.

227. Id. § 2.02(a), 1979 Ill. Legis. Serv. at 2664.

228. Id. § 2.02(b), 1979 Ill. Legis. Serv. at 2664.

229. Id. § 2.03(b), 1979 Ill. Legis. Serv. at 2665.


231. 2 Ill. Reg. 179-90 (No. 34 1978). The Abandoned Mined Lands Reclamation Council is a part of the Illinois Department of Mines and Minerals. Id.


233. 2 Ill. Reg. 184 (No. 34 1978).

234. Id. at 185.

235. Id.
those contained in Priority V and Priority VI, where each condition can be assigned only a maximum of five points. 236 These priority guidelines particularize thirty different factors or conditions, 237 but only contain two specific references to subsidence problems, 238 further illustrating the difficulty of applying the 1975 Act to subsidence problems. Specifically, Priority I recognizes "[s]ubsidence damage to water supply, sewage or gas lines" 239 and Priority V recognizes the "[d]egree of damage to a public facility due to subsidence." 240

It may be inferred from reading the language of both the 1979 Act and the guidelines developed under the 1975 Act that subsidence control or rehabilitation projects will receive substantial competition from reclamation projects unrelated to subsidence. This result is to be expected because these laws were not designed to deal exclusively with subsidence problems, if at all. 241 The priority system will determine which projects are chosen for subsidence control or rehabilitation. To date, the Council has initiated only three projects, none of which have dealt with subsidence. 242

The program's evolution will depend largely upon federal requirements because the primary purpose in passing the 1979 Act was to "satisfy the requirements of the federal Surface Mining Control and Reclamation Act of 1977 . . . which makes this State eligible for funds for reclamation of abandoned lands and waters under that Act." 243 The federal Act provided that monies from this fund could be used for the "prevention, abatement, and control of coal mine subsidence." 244 Thus, the Illinois Act should be interpreted broadly to allow the use of funds for these purposes. A distinction can be drawn between expending funds to repair damage once subsidence has occurred and expending funds to prevent, abate, or control subsidence once it begins but before it has run its course. 245 The statement of purposes for

236. Id. at 189. Priority V is "[t]he protection, repair, replacement, construction, or enhancement of public facilities such as utilities, roads, recreation, and conservation facilities adversely affected by past mining development." Id. An illustrative Priority V condition is the "[d]egree of damage to a public road or bridge due to mine-related trucking operations." Id.

237. Id.

238. Id.

239. Id. at 185.

240. Id. at 189.

241. See text accompanying notes 206-09 supra.

242. Telephone Interview with Mr. Al Grosboll, Executive Director, Abandoned Mined Lands Reclamation Council (November 30, 1978). While the first two projects initiated concerned surface effects of underground mines, these effects involved gob piles and drainage problems. The third project involved a surface mine.

243. P.A. 81-1020, § 1.02(b), 1979 Ill. Legis. Serv. at 2663 (West). See also notes 212 and 232 supra.


245. This is consistent with the language found in the Surface Mining Control and Reclamation Act of 1977 that specifically states that "no part of the funds provided under this title may be used to pay the actual construction costs of housing." 30 U.S.C. § 1237(h) (Supp. I 1977). As the legislative history points out, however, affected land, including damaged structures, can be purchased using the funds and then the seller can use the money received to buy another
passing the 1979 Act also identified another major defect of the 1975 Act—a lack of sufficient funding to carry out the goals of the Act, particularly if these goals include dealing with subsidence.\textsuperscript{246} The adoption of the 1979 Act cures this defect by making Illinois eligible for federal funding to prevent, abate, and control subsidence.

The net result is that while the definitions of the 1975 Act may be broad enough to allow the Council to deal with subsidence problems, as a practical matter, other aspects of the law do not effectively address such problems. The 1979 Act removes some of these barriers, particularly by eliminating the necessity of acquiring title to the land to be reclaimed. The 1979 legislation, however, does not create any new technology, nor does it make present technology less expensive. Because technological and economic factors\textsuperscript{247} are an integral part of the balancing process the Council performs when deciding which projects it will undertake,\textsuperscript{248} it is likely that subsidence projects will receive a low priority. Consequently, what the Council does may depend on what funds become available to it as a result of the federal Surface Mining Control and Reclamation Act of 1977\textsuperscript{249} and what strings are attached to the use of those funds.

\textsuperscript{246} In the original appropriation bill for the Council, the General Assembly specified $2,500,000. Governor Walker reduced this figure to $100,000, which he considered sufficient "to get the new program under the way." 1974 Ill. Laws 1451. In the Act, which took effect on July 1, 1975, the General Assembly appropriated "$1,500,000 or so much thereof as may be necessary ... for land acquisition, land reclamation and other expenses connected with administering and effectuating the purposes of the 'Abandoned Mine Lands Reclamation Act.'" 1975 Ill. Laws 732.

\textsuperscript{247} See, e.g., priorities II-F, III-E, 2 Ill. Reg. 185-87 (No. 34 1978).

\textsuperscript{248} P.A. 81-1020, § 2.03(b), 1979 Ill. Legis. Serv. 2665 (West). The Act also states "the program shall be administered to provide the most effective use in this State of abandoned mine reclamation funds under the Federal Act." Id. § 1.05, 1979 Ill. Legis. Serv. 2664.

The decision-making process has been carried forward with the publication of ILLINOIS INSTITUTE OF NATURAL RESOURCES, DECISION ANALYSIS FOR ABANDONED MINE RECLAMATION SITE SELECTION AND PLANNING (1979). This study is replete with data and discusses extensively (1) a modelling framework for site selection and planning, (2) quantification of environmental, social, and political impacts, (3) regional water quality considerations, and (4) economic benefits from reclamation.

\textsuperscript{249} 30 U.S.C. §§ 1201-1328 (Supp. I 1977). As of September 30, 1978, $2,328,218 were available for Illinois in the Abandoned Mine Reclamation Fund. ANNUAL REPORT OF THE SECY OF THE INTERIOR UNDER THE SURFACE MINING CONTROL AND RECLAMATION ACT OF 1977, at 43 (1978). This report also identified a work-initiated, high-priority subsidence project at O'Fallon, Illinois to which $100,000 had been allocated and a tentatively approved project at Belleville, Illinois to which $120,000 had been allocated. Id. at 44-45.
Another important influence on the Council will be the outcome of pilot project studies authorized by Illinois Public Act 80-1. This Act, which became effective March 23, 1977, is the first Illinois Act to deal exclusively with subsidence problems. It was enacted so that the state may qualify for a three to five million dollar federal mine subsidence control pilot project that would attempt to halt subsidence in areas around Belleville and Maryville, Illinois. The Act itself, however, says nothing about a federal project. It is drafted in general terms and authorizes the Illinois Mining Board to hold hearings to determine if subsidence in an abandoned mine has caused, or is likely to cause, damage to surface structures, or constitutes a danger to public health, safety, and welfare. If such a finding is made and the condition is not remedied within thirty days after publication of the findings, an authorized representative of the Illinois Department of Mines and Minerals has the right to enter any portion of the abandoned mine to perform refilling "or such other remedial work as is deemed necessary by the Department." Although the Act does not define an abandoned mine, it does provide specifically that it will not relieve any mine owner or operator of legal responsibilities otherwise imposed by law.

To date, the only pilot projects pursued under the Act have been those initially intended with its passage. Nevertheless, because of the general terms of the Act, it might be a useful tool for the Department of Mines and Minerals in the future. Although the 1977 Act appears to duplicate to some extent the 1979 Abandoned Mined Lands and Waters Reclamation Act, there are some significant differences. For example, the 1977 Act gives the director of the department the authority to enter the property in question and take temporary remedial action without notice or a hearing if he or she determines that "irreparable injury will result unless immediate action is taken." There is no comparable provision in the 1979 Act. Furthermore, the 1977 Act gives the mine owner or operator the opportunity to take remedial action before the department intervenes as long as no impend-

253. Id.
254. Id. § 3405.
255. Efforts under the federal projects have met with mixed results in filling aban-
256. The 1977 Act was passed because some of the land to be worked on in the federal project was in private ownership and the owners could not be located. Thus, some method to obtain consent had to be established. The 1979 Abandoned Mined Lands and Water Reclama-
tion Act now provides for proceeding without consent to complete rehabilitation projects. P.A. 81-1020, § 2.04, 1979 Ill. Legis. Serv. 2665 (West).
258. Entry and consent provisions under the 1979 Illinois Act essentially repeat the provi-
ing irreparable injury exists. This type of provision might be more appropriate in the 1979 Act because under that act the department can impose a lien against the property for its improved value. A property owner may want to avoid this type of lien by taking the necessary remedial action himself or herself. Perhaps the major defect with the 1977 Act is that the Mining Board, a different entity than the Abandoned Mined Lands Reclamation Council, makes the findings regarding the threat of damage to surface structures and danger to public health, safety, and welfare. This designation of the Mining Board as the body to deal with subsidence problems is further evidence that the legislature did not contemplate that its 1975 creation, the Abandoned Mined Lands Reclamation Council, had any authority concerning subsidence problems. A strong argument can be made that Illinois' efforts at dealing with abandoned mine problems should not be so fragmentized and that the two acts should be integrated.

Subsidence Insurance

Public Act 80-1413, effective November 29, 1979, amended the Illinois Insurance Code to make insurance available, as of October 1, 1979, that will cover losses caused by mine subsidence. This Act can be profitably analyzed in its coverage, funding, administration and its approach to subrogation, and compared, where appropriate, with the legis-

259. ILL. REV. STAT. ch. 96 1/2, § 3404 (1977).
261. The Mining Board consists of six mine officers, three who represent employers and three who represent employees, plus the Director of the Department of Mines and Minerals. ILL. REV. STAT. ch. 127, § 5.04 (1977).
262. ILL. REV. STAT. ch. 96 1/2, § 3404 (1977).
263. ILL. REV. STAT. ch. 73, §§ 1065.401-414 (Supp. 1978).
264. The Act was originally to be effective on January 1, 1979, conditional upon subsequent funding legislation, id. at § 1065.401, which was never enacted. In 1979, the General Assembly deleted these conditions, P.A. 81-1178, § 801, 1979 Ill. Legis. Serv. 3143 (West), and the Act became effective November 29, 1979. 1979 Ill. Legis. Serv. 3145 (West).
265. ILL. REV. STAT. ch. 73 (1977).
266. Id. § 1065.404 (Supp. 1978). Although the conditions stipulated in the original Act, see note 264 supra, were not satisfied by October 1, 1979, the amendatory legislation retained the original October 1, 1979, date. That should be sufficient to constitute retroactive approval for the state program, which commenced after October 1, but before the amendatory law became effective. P.A. 81-1178, 1979 Ill. Legis. Serv. 3144 (West). If the Governor had not exercised his amendatory veto power to make the bill effective immediately upon passage rather than on July 1, 1980, the state's program might have been in jeopardy from October 1979 until July 1980. See Governor's Veto May Speed Mine Subsidence Insurance, SOUTHERN ILLINOISAN, Sept. 28, 1979, at 32.
267. ILL. REV. STAT. ch. 73, § 1065.404 (Supp. 1978). Mine subsidence is defined as: loss caused by lateral or vertical movement, including collapse which results therefrom, of structures from collapse of man-made underground mines, including, but not limited to coal mines, clay mines, limestone mines, and fluorspar mines. Loss caused by earthquake, landslide, volcanic eruption or collapse or [sic] storm and
tion of Pennsylvania, the only other state to enact a subsidence insurance statute.

1. Coverage

Although the Act mandates insurance coverage of losses caused by mine subsidence, the coverage required varies for different geographical areas. In thirty-four Illinois counties, every new or renewed policy directly insuring a structure must include subsidence insurance at a separately stated premium, while in other counties, such insurance must merely be made available. Although the Act makes subsidence insurance available throughout the state, it also limits its broad geographic coverage by allowing an insured to waive coverage in those thirty-four counties where inclusion is automatic. This waiver must, however, be written.

Coverage in Illinois is further limited to "structures," defined as "any dwelling, building or fixture permanently affixed to realty, but . . . not . . . land, trees, plants, and crops." This definition presents two problems. If the phrase "permanently affixed to realty" applies to dwellings and buildings as well as to fixtures, a question arises whether mobile homes, corncribs, and other farm buildings on skids are insurable. Furthermore, because land, trees, plants, and crops have been specifically excluded, a question arises whether the legislature intended fixtures such as power lines, paved roads, and tiled drainage systems to be insured. To the extent that subsidence insurance is available only through existing insurance policies on struc-

sewer drains and rapid transit tunnels is specifically excepted.

P.A. 81-1178, § 802(2), 1979 Ill. Legis. Serv. 3143 (West).

268. 52 PA. CONS. STAT. ANN. §§ 3201-3206 (Purdon Supp. 1979). The Pennsylvania program was instituted in 1961. Id.

269. Although the Act does not specify 34 counties, it calls for automatic coverage in all counties but then gives the facility and the director the authority to exclude certain counties. ILL. REV. STAT. ch. 73, §§ 1065.404-405 (Supp. 1978). This exclusionary authority has been used to exclude from automatic coverage those counties with less than one percent of the surface undermined. Telephone interview with Mr. Al Grosboll, Executive Director, Abandoned Mined Lands Reclamation Council (Sept. 28, 1979). The 1979 amendment added a mandatory exemption from automatic coverage in any county with 1,000,000 or more inhabitants and any contiguous county. P.A. 81-1178, § 805, 1979 Ill. Legis. Serv. 3144 (West).

270. ILL. REV. STAT. ch. 73, § 1065.404 (Supp. 1978).

271. Id. § 1065.403(b).

272. Id. § 1065.404.

273. Id. In Pennsylvania, insurance is available only through application. 52 PA. CONS. STAT. ANN. § 3212 (Purdon Supp. 1979).

274. ILL. REV. STAT. ch. 73, §§ 1065.403(b), 1065.404 (Supp. 1978). Pennsylvania law originally protected only "homeowners," 52 PA. CONS. STAT. ANN. § 3203 (Purdon 1966), but was amended to extend coverage to owners of structures, without defining structure. 52 PA. CONS. STAT. ANN. § 3212 (Purdon Supp. 1979).

275. ILL. REV. STAT. ch. 73, § 1065.402(6) (Supp. 1978).
tures,\textsuperscript{276} this question can be answered by determining whether current policies insure power lines and paved roads.

In addition, the Act limits required insurance coverage to a maximum of $50,000.\textsuperscript{277} While this amount will probably cover most, if not all, damage to individual houses, it may be insufficient to protect adequately multi-family units, commercial buildings, and public facilities such as schools.\textsuperscript{278} If the Act's maximum amount of coverage is not increased at a later date to insure these facilities adequately, perhaps experience under the Act will convince private insurance carriers to offer policies in excess of the statutory amount.\textsuperscript{279}

The Act not only places a ceiling on coverage, but it also establishes a variable deductible, ranging from a minimum of $250 to a maximum of $500 based on two percent of the policy's total insured value.\textsuperscript{280} In other words, the $500 deductible goes into effect when coverage is $25,000 and the $250 deductible applies to coverage of $12,500 and below. Between $12,500 and $25,000, the deductible will vary. While the legislatively-declared deductible found in the Illinois Act\textsuperscript{281} creates more certainty in coverage, it does not give the consumer the flexibility in premium alternatives usually associated with varying deductible amounts.\textsuperscript{282}

Finally, even if the insured does not waive coverage, seeks to ensure a structure that fits the statute's definition and that can be adequately insured for $50,000, and is willing to assure the deductible amount, an insurer can refuse coverage when prior subsidence has occurred. The Act permits an insurer to refuse to cover a structure completed after October 1, 1979, if the land underlying that structure experienced mine subsidence before the con-
struction and if it is likely that any future damage will not be "minimal." An insurer can also refuse to cover any structure damaged by subsidence until repairs are made.

2. Funding

The manner in which a program is funded will often help determine its effectiveness. Indeed, a dispute about funding delayed the initial implementation of the Illinois subsidence insurance program, and, reflecting this dispute, the bill passed contained three alternative means of funding the insurance program, from which the legislature was required to choose before the bill was to become effective. Each of these options contemplated some subsidizing of the program by the state; however, in 1979, the legislature eliminated these funding options, choosing to rely entirely on premiums. To get the program started, the Act provides for initial advances to establish an initial pool for administration costs and for paying early claims until such time as the premiums from the policies can be used to cover both administration and pay-off costs. Specifically, the Act provides for the state initially to advance the fund of $100,000. Whenever the fund balance falls below $50,000, the director can advance additional monies, up to a $50,000 balance, to pay claims, but the maximum state advancement is

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283. IL REV STAT ch. 73, § 1065.406 (Supp. 1978). The insurer must "provide evidence" and needs the facility's approval before any such refusal can be made. Id.

284. Id. Here the burden is on the owner of the structure to provide "reasonable evidence." Id. It is not clear why a structure owner must provide "reasonable evidence" while an insurer need only "provide evidence." See note 283 supra.

285. Id. While the Pennsylvania statute does not provide for these types of exclusions, regulations allow them when previous subsidence damage has not been repaired, 25 Pa Code § 401.11(e) (1979), or, in lieu of requiring repair, the insurer can impose a deductible in the policy equal to the repair cost. Id.

286. See Bickering Bogs Mine Subsidence Bill, SOUTHERN ILLINOISAN, June 23, 1977, at 8, col. 3; Sales Tax Would Help Pay Mine Subsidence Insurance, SOUTHERN ILLINOISAN, April 8, 1977, at 7, col. 4; Mine Subsidence Bill Gets Finishing Touch, SOUTHERN ILLINOISAN, April 1, 1977, at 12, col. 1.

287. IL REV STAT ch. 73, § 1065.401 (Supp. 1978). See note 264 supra.

288. IL REV STAT ch. 73, § 1065.403(c)(4) (1978). To keep the premiums low enough to make the insurance affordable and to minimize the insurance company losses, it was anticipated that the program would be subsidized by up to two million dollars from state tax funds. Sales Tax Would Help Pay Mine Subsidence Insurance, SOUTHERN ILLINOISAN, April 8, 1977, at 7, col. 4.

289. P A 81-1178, § 801, 1979 Ill. Legis. Serv. 3143 (West) (striking IL REV STAT ch. 73, §§ 1065.401, 403(f) (Supp. 1978) (in so far as they relate to funding, and modifying § 1065.403(c). Id. Although the 1979 amendment does not, however, provide for reimbursement from the fund to the insurance department for its administrative costs, it does specifically require the reimbursement of facility administrative costs from the fund. P A 81-1178, § 807, 1979 Ill. Legis. Serv. 3143 (West). Thus, to the extent that the insurance department is involved in the enterprise, the state underwrites some part of the program's cost.

290. Id. § 803(a).
291. Id.
292. Id.
Any advanced funds are to be repaid in equal installments during each of three years, beginning with calendar year 1984.

By contrast, the Pennsylvania subsidence insurance statute originally provided that the program's administration and the payment of claims were to be financed by a one million dollar state appropriation as well as by any premiums collected. The law was then amended to provide for the payment of administration expenses from the department's general appropriation, resulting in a substantial and permanent state subsidy of the insurance program. In addition, if a mine subsidence emergency arises, the Pennsylvania governor has authority to transfer a maximum of two million dollars to the fund for various forms of mine subsidence emergency relief.

In Illinois, initial premiums for subsidence insurance have been set at six dollars for the first $10,000 of coverage and one dollar for each additional $10,000 of coverage up to the $50,000 maximum, yielding a total premium of ten dollars. In Pennsylvania, however, comparable coverage premiums are from fifty to one hundred dollars. Although it is not entirely clear why such a substantial premium disparity should exist, Illinois officials concede that their premium rates are the result of guesswork. It is clear that the Act's purpose should not be frustrated by inadequate premiums, and thus, inadequate funding. The legislature stated that premium rates must be sufficient "to satisfy all foreseeable claims upon the Fund . . . and to provide a reasonable reserve fund for unexpected contingencies."

If moneys are not available in the state fund to reimburse them, then insurers

293. Id. § 803a(b).
294. Id. § 803a(c). The director's authority to make advancements expires on March 31, 1982. Id.
295. Id.
297. Id. § 3205.
298. Id. § 3241. The funds shall be used for matching federal funds for mine subsidence relief, to move people whose homes are destroyed or endangered until they are repaired or substitute residences are located, and to provide loans with two percent maximum interest for repair or replacement of homes. Id.
299. See Subsidence Insurance 'Cheap' and Available Now, Official Says, SOUTHERN ILLINOISAN, Oct. 4, 1979, at 3, col. 1; Subsidence Insurance Rates Ok'd, SOUTHERN ILLINOISAN, Sept. 30, 1979, at 27, col. 4. This premium is for frame construction. There is a two dollar differential for masonry construction resulting in a total premium of $12 for full coverage. Id.
300. See Subsidence Insurance 'Cheap' and Available Now, Official Says, SOUTHERN ILLINOISAN, Oct. 4, 1979, at 3, col. 1. The Pennsylvania regulations provide that premiums cannot be less than $15 for residential structures or $25 for commercial structures. 25 PA. CODE § 401.13(a) (1979). Pennsylvania residential rates are said to range from $15 to $51 for $5,000 to $50,000 coverage respectively and are said to be set at $200 for $50,000 coverage for commercial structures. COMPTROLLER GENERAL OF THE UNITED STATES, ALTERNATIVES TO PROTECT PROPERTY OWNERS FROM DAMAGES CAUSED BY MINE SUBSIDENCE 30 (1979) [hereinafter cited as COMPTROLLER GENERAL ALTERNATIVES].
301. See Mine Subsidence Insurance Will Be Available Oct. 1, Forms or Not, SOUTHERN ILLINOISAN, September 24, 1979, at 7, col. 1; Area Coal-Mine Subsidence Insurance Starts in October, SOUTHERN ILLINOISAN, August 19, 1979, at 3, col. 1.
302. P.A. 81-1178, § 803(e), 1979 Ill. Legis. Serv. 3144 (West).
need not pay off claims. Thus, it is critical to the Act's purpose that sufficient premiums be determined. Because there is only the Pennsylvania experience to consider in setting premiums, which Illinois has apparently rejected, there should be an opportunity during 1980 to review the adequacy of Illinois premiums and to make adjustments if necessary.

3. Administration

The effectiveness of a statutory program also will be affected by the manner in which it is to be administered. While the Pennsylvania insurance subsidence program is run entirely by the state, the Illinois system requires the cooperation of the insurance industry. Specifically, in Illinois private insurance carriers write subsidence insurance policies, for which they receive “ceding commissions.” They settle subsequent claims and are then reimbursed by the state fund. Thus, although Illinois has reduced administrative costs, it loses part of the premium, which otherwise would go into the state fund, to private insurance companies. In addition, it is not clear under the Illinois scheme what incentive an insurer has to negotiate with an insured who submits a claim for loss, because the insurer is entitled to full reimbursement from the fund as a matter of right except in cases of fraud. An insurer would save administrative costs by simply paying the claim and requesting reimbursement. Moreover, the only recourse against a paid insured occurs when there is fraud or a violation of the policy's conditions.

Furthermore, in Illinois, the Director of the Department of Insurance and the Industry Placement Facility supervise the subsidence insurance program. In Pennsylvania, however, the program is overseen by the Coal and Clay Mine Subsidence Insurance Board, whose members are

303. Id. § 807.
304. Because advances by the state are to be terminated on March 31, 1982, id. § 803(c), it is necessary for the premiums to be adjusted before that time to ensure a sufficient cash flow.
305. The facility is under a mandatory duty to “periodically review” the premiums and experiences, and “to make changes as required.” Id. § 803(d).
306. Ill. Rev. Stat. ch. 73, § 1065.407 (Supp. 1978). The ceding commission is to be uniform and to be “based on reasonable administrative costs to the insurers, including agents’ commissions.” P.A. 81-1178, § 808, 1979 Ill. Legis. Serv. 3145 (West).
308. Id. § 1054.41(1) (Supp. 1978). Perhaps the statutory reference that “the company is authorized to settle losses in the customary manner” will give sufficient regulatory authority to see that unnecessary pay-offs are not made. Id. (emphasis added).
309. Id. § 1065.411(2).
310. Id. § 1065.413.
311. Id. § 1065.401. The Industry Placement Facility is the organization formed by insurers licensed to write and engaged in writing basic property insurance . . . within the State of Illinois to assist applicants in urban areas in securing basic property insurance and to formulate and administer a program for the equitable apportionment among such insurers of such basic property insurance.
Id. § 1065.70(4).
312. 52 Pa. Cons. Stat. Ann. § 3203 (Purdon Supp. 1979). Formerly, this board was called the Anthracite and Bituminous Coal Mine Subsidence Board.
the Secretary of the Department of Environmental Resources, the Commissioner of Insurance, and the State Treasurer.\textsuperscript{313} The secretary chairs the board, which emphasizes that the Pennsylvania subsidence insurance scheme is both an integral part of and coordinate with the Environmental Resources Department's other subsidence control activities. By contrast, the Illinois Act does not refer to the Illinois Department of Mines and Minerals, which is the Illinois counterpart of Pennsylvania's Department of Environmental Resources. Therefore, the Illinois system for administering the subsidence insurance program may be hampered by its delegation to private insurance companies of the responsibility to write policies and settle claims as well as its failure comprehensively to integrate all state activities regarding subsidence control. One alternative not adopted in Illinois is Pennsylvania's system of total state administration.

4. Subrogation

Although the administration of Illinois' subsidence insurance program may prove to limit the program's effectiveness, both the Pennsylvania\textsuperscript{314} and Illinois\textsuperscript{315} laws allow the state fund to be subrogated for the insured's claims against those responsible for the subsidence.\textsuperscript{316} While an individual claimant, particularly one with a small claim, might be unwilling or unable to undertake the time and expense of litigation against a mine operator, the fund will usually be in a much better position to pursue the mine operator as it may be required to pay several claims arising from the same subsidence. Thus, this subrogation feature may assist in holding mine operators responsible.

Insurers in Illinois also retain the right of subrogation, and they are required to report semi-annually concerning subrogation losses and remit net recoveries from subrogation actions to the Industry Placement Facility.\textsuperscript{317} Remittance of all monies recovered would, however, seem inappropriate in cases where the insurer has insured in excess of $50,000, the statutory maximum,\textsuperscript{318} and has paid a claim in excess of that amount. In this situation, the insurer should have to remit only up to, but not beyond, the $50,000 paid out by the fund. It is not clear why insurers would bring subrogation actions, except in instances where they have paid a claim in excess of $50,000, because they receive no special compensation for doing so.

In short, with Public Act 80-1413,\textsuperscript{319} Illinois has undertaken a laudable effort to require insurance against subsidence damage. Although this effort

\begin{itemize}
\item \textsuperscript{313} Id. The Secretary of Mines and Minerals Industries has held a position on the Board, but this position was abolished and replaced by the position of Secretary of Environmental Resources. 71 PA. CONS. STAT. ANN. § 66 (Purdon Supp. 1979).
\item \textsuperscript{314} 52 PA. CONS. STAT. ANN. § 3217 (Purdon Supp. 1979).
\item \textsuperscript{315} ILL. REV. STAT. ch. 73, § 1065.412 (Supp. 1978).
\item \textsuperscript{316} The insured should retain his or her claim to the loss represented by the deductible, see note 280 and accompanying text supra, and to any loss in excess of the policy's limits.
\item \textsuperscript{317} Id. §§ 1065.412(1), (3).
\item \textsuperscript{318} Id. § 1065.404.
\item \textsuperscript{319} Id. §§ 1065.401-.414.
\end{itemize}
is, perhaps, less comprehensive than ultimately desirable, it is a sound first step.

Research

Public Act 80-1436, which became effective September 15, 1978, requires the Illinois Institute for Environmental Quality (Institute) to review “existing underground mining practices, mine subsidence problems, technologies designed to prevent mine subsidence, and any other available information pertaining to the relationship between mining practices and mine subsidence.” Although this review was to be completed before December 31, 1979, the date the Institute is to report to the General Assembly, it has not yet been submitted. This report must contain its findings and recommend legislation necessary to protect Illinois property owners from mine subsidence. In connection with the review and report, the Act further requires the Institute to review the “laws and rules and regulations of other governmental units which are designed to prevent mine subsidence.” It is not clear, however, which governmental units are to be included in this review.

The Act also provides for the Institute to review the status of underground mine maps, statutory references to public access to underground mine information, and the availability of underground mining information to county clerks and recorders of deeds. Based on this study, the Institute is to report to the general assembly “its findings and recommendations for legislation to provide citizens access to underground mining information.” The most critical need seems to be to allow the public access to information already available at the county recorders’ offices in the form of underground mine maps. The public needs such access in order to enable it to make informed decisions about whether to purchase land and whether to buy the subsidence insurance Illinois has recently made available to it.

Future Mining

The Illinois General Assembly passed two acts designed to enable Illinois to comply with the requirements and programs of the federal Surface Mining Control and Reclamation Act of 1977 as it relates to future mining within the state. The first Act authorizes Illinois’ participation in the temporary

321. This institute now is called the Illinois Institute of Natural Resources. ILL. REV. STAT. ch. 96 1/2, §§ 7401-7407 (Supp. 1978).
323. Id.
324. Id. See text accompanying notes 381-446 infra.
327. See text accompanying notes 68-70 supra.
328. See text accompanying notes 263-319 supra.
program, established under the federal law; the second Act authorizes participation in the permanent program. While the first Illinois Act includes no specific reference to subsidence, the second Illinois Act requires mine operators to "adopt measures consistent with known technology in order to prevent subsidence causing material damage to the extent technologically and economically feasible, maximize mine stability, and maintain the value and reasonably foreseeable use of surface lands . . . ." The operative scope of this provision, which was copied from the federal Act, appears severely restricted because it excepts mining technology requiring planned subsidence, such as long-wall mining, and mandates that the Act not be construed to prohibit standard room and pillar mining.

335. Longwall mining is the principal method of underground mining for coal in Europe but only accounted for two and one-half percent of underground coal production in the United States in 1972. The method has been described as follows:

In the longwall method, most of the seam is extracted by more or less continuously slicing off the coal along a series of long faces that are of the order of 300 or more feet in length. In longwall advance mining, the coal seam is extracted as completely as possible, progressing from the main entry toward the boundaries of the property. In longwall retreat mining, the haulageways necessary to provide access, service and ventilation are first driven . . . and then faces are developed to extract the coal by retreating toward the shaft. The advance methods allow a mine to reach full production operation soon after shafts are developed to the coal seam, but tend to result in difficult roof control and haulageway maintenance costs. Conversely, retreat systems involve longer delays in start-up and return on capital investment, but result in better working conditions, since roof collapse and associated ground disturbances are 'left behind' the face, i.e., occur outside the active areas of the mine.

336. Room and pillar mining is the traditional United States production method for underground coal mining and is reported to account for over 90% of underground coal production in the United States in 1975. It has been described as follows:

In room and pillar mining the coal is extracted in two main stages. In the first stage the coal is mined in a pattern of rooms separated by pillars of unmined coal. The rooms should be wide enough to allow effective passage of mining machinery, but narrow enough to avoid risks of roof collapse. The roof is usually reinforced by 'rock bolting' and other forms of support to guard against roof falls. The width of the

STUDY COMMITTEE TO ASSESS THE FEASIBILITY OF RETURNING UNDERGROUND COAL MINE WASTES TO THE MINED-OUT AREAS, UNDERGROUND DISPOSAL OF COAL MINE WASTES: A REPORT TO THE NATIONAL SCIENCE FOUNDATION 38-39 (1975) [hereinafter cited as REPORT TO NATIONAL SCIENCE FOUNDATION].
While neither the initial federal program nor the Illinois program adopted pursuant to the federal program implement these subsidence provisions, the federal rules for the permanent program effectuate them. First, the federal rules about application for underground mine permits require the applicant to submit information regarding subsidence. Second, these rules establish some basic standards regarding mine subsidence with which a mine permit holder must comply. Each must be discussed in turn.

pillar is such that it is at least sufficient to support the overlying rock without collapse. The required size of the pillar will increase as the depth of the mine increases. Pillar dimensions are influenced by procedures used in subsequent (stage 2) extraction operations. Ideally, the entire coal seam is developed in a regular pattern of pillars throughout the mining property. If first-stage mining only is practiced and the pillars are left in the ground, the mining method is known as ‘partial extraction.’ Over 70 percent of U.S. mines practice partial extraction in at least one section of the mine.

The second stage, pillar extraction, begins when the boundary of the working area is reached. Coal is extracted from the pillars while ‘retreating’ toward the main entry. Successive cuts are taken to remove the pillar while the miner is protected by roof support from posts, cribs, and bolted roof. Elimination of these pillars removes support from the overlying rock which consequently collapses or ‘caves’ into the mined out area after the miners have moved to the next pillar.

Adopting a stepped retreat line allows pillar extraction to be carried out under relatively safe conditions where the roof collapse does not occur within the working area. Some danger does exist, however, and it is usually necessary to leave some portion (‘remnants’) of the pillars for worker and machine protection during extraction operations. These remnants crush as the extracted region is enlarged. In this manner the coal extraction operations progressively retreat toward the mine shaft or main entry, removing as much of the remaining coal as possible. This is known as ‘complete’ extraction even though not all the coal is removed.

[The average percentage extraction in room and pillar mining in U.S. mines is approximately 58 percent. This percentage decreases with the depth of mining and the method becomes progressively less economic.]

Id. at 34-37 (1975).
337. 30 C.F.R. §§ 700-837 (1977). Although underground mining general performance standards were included in the initial program, they dealt essentially with surface work areas, disposal of material and waste on the surface, protection of hydrologic systems, topsoil handling and revegetation. Id. §§ 717.11-20.
339. The federal Act also provides that the provisions of that Act relating to surface mining State and Federal programs, permits, bonds, inspections and enforcement, public review, and administrative and judicial review are to be applicable to surface impacts of underground mining ‘with such modifications to the permit application requirements as are necessary to accommodate the distinct difference between surface and underground coal mining.’ Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. § 1266(d) (Supp. I 1977). For purposes of this study, the only significant provisions relate to bonding. A review of the bonding regulations, however, shows no meaningful adaptation to underground mining at least as applicable to surface subsidence. See 30 C.F.R. §§ 800.1-809.12 (1979).
341. Id. § 784.20.
342. Id. §§ 817.121, 817.122, 817.124, 817.126.
1. Mining Permits

An applicant for an underground mining permit is required to include a survey showing if there are any "structures or renewable resource lands" within the proposed permit area. If such structures or renewable resource lands exist, then the survey must show whether subsidence could cause "material damage or diminution of reasonably foreseeable use" of the structures or renewable resource lands. If the survey shows, or the regulatory authority finds, that material damage or diminution of use could result, then the applicant must submit a subsidence control plan. The plan must describe: (1) the mining methods and other actions of the operator that might affect subsidence; (2) the measures that will be taken to prevent subsidence from causing material damage or diminution of use; (3) the measures that will be taken to mitigate effects of material damage or diminution of use; and (4) the measures that will be taken to determine the degree of material damage or diminution of use. These descriptive requirements interrelate with the basic subsidence control standards established for all underground mines holding permits.

2. Basic Subsidence Control Standards

The four sections of the regulations establishing these basic subsidence control standards deal respectively with general requirements, notice to the public, surface owner protection, and buffer zones. The general requirements do little more than restate the statutory language, indicating only that the prevention of subsidence can be accomplished "by leaving adequate coal in place, backfilling, or other measures to support the surface, or by conducting underground mining in a manner that provides for planned and controlled subsidence." The requirements also provide that the operator must comply with the subsidence control plan submitted in his or her application. In this section, the Office of Surface Mining intended to

343. Renewable resource lands has been defined to mean "aquifers and areas for the recharge of aquifers and other underground waters, areas for agriculture or silvicultural production of food and fiber, and grazinglands." Id. § 701.5.
344. Id. § 784.20.
345. Id.
346. Id. The underlying assumption is that lands that are not "renewable resource lands" now, will not become so in the future.
347. Id. § 784.20(a).
348. Id. § 784.20(b).
349. Id. § 784.20(c).
350. Id. § 784.20(d).
351. Id. § 817.121.
352. Id. § 817.122.
353. Id. § 817.124.
354. Id. § 817.126.
355. Id. § 817.121. See also 44 Fed. Reg. 15.075-76 (1979).
make it clear that no one way to prevent or minimize the risk of subsidence exists, and local regulatory authorities must accordingly consider the particular localities and mining operations. 357

The public-notice section provides more for notice to the owners and residents of property overlying or adjacent to a prospective mining area than it does for notice to the public. 358 The expectation is that measures to protect against subsidence damage can be taken with at least six months notice by mail to the surface and adjacent owners and residents. 359 For this section to be fully effective, "property owners" must be interpreted broadly so as to include, for example, utility easement owners. 360

The provisions on surface owner protection require a permit holder who conducts underground mining that results in subsidence causing material surface damage or diminution in surface use to restore or rehabilitate the property, 361 purchase the property at fair market value, 362 or purchase an insurance policy for the surface owner before mining begins. 363 In the rule-promulgation process, arguments were made that the surface owner protection requirements should not apply where the permit holder owned the surface, or where the surface owner had consented to the mining or waived the right to subjacent support. 364 The Office of Surface Mining responded that Congress sought to protect a broader public interest than merely securing the rights of an individual surface owner and that the public has an interest in the future use of the surface. 365 These regulations protect this interest in the future use of the surface rather than the rights of individual surface owners. Moreover, the statute expressly states that control measures must be adopted to "maintain the value and reasonably foreseeable use of surface lands." 366 Thus, the Office of Surface Mining clearly appears correct in asserting that the focus of the controls should be on protecting the integrity of the land. The secondary public concern of preventing widespread loss to individual surface owners is not to be overlooked, however, and this regulation in particular seeks to impose maximum responsibility on mine permit holders in order to minimize public impact and responsibility. The

358. Id. 30 C.F.R. § 817.122 (1979).
360. Utility protection is discussed by the Office of Surface Mining in the justification for the rule. Id.
362. Id. § 817.124(b)(2) (1979).
363. Id. § 817.124(c) (1979).
focus of this rule, therefore, is not on preventing subsidence, which is the focus of the general requirements rule, but rather, on minimizing public loss in situations where subsidence occurs despite implementation of preventive measures. It recognizes that not all subsidence can be prevented, and, of course, in some instances subsidence will even be planned. With both considerations in mind, the rule may be too flexible by allowing three options, when the focus should be on the first option because that option not only minimizes public loss but goes the furthest in maintaining the integrity of the surface.

The final subsidence control standards—the buffer zone rules—limit, or prohibit, mining beneath or adjacent to certain streams or water impoundments, aquifers, or public buildings. In each situation, the regulatory authority has discretion to allow mining if it determines that subsidence will not cause “material damage” to the affected category of property. In addition, these rules require the suspension of mining when imminent danger threatens urbanized areas, cities, towns or communities, industrial or commercial buildings, major impoundments, or permanent streams.

State plans for implementing the federal requirements were to be submitted on March 3, 1980, but have not yet been completed. Despite the promulgation of final regulations for the permanent program and the submission of state plans, considerable uncertainty remains regarding the scope of the state programs for two reasons. First, although the Surface Mining Control and Reclamation Act of 1977 and the regulations promulgated thereunder have been challenged in the courts, the litigation has not yet been concluded. Second, Congress is considering a bill that would exempt states

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367. See text accompanying notes 356-57 supra.
368. 30 C.F.R. § 817.126(a) (1979).
369. Id. § 817.126(b).
370. Id. § 817.126(c).
371. Id. § 817.126.
374. On February 17, 1980, it was announced that Illinois was seeking a two month extension on the deadline. Extension Sought by State on Plan to Regulate Illinois Surface Mining, SOUTHERN ILLINOISAN, Feb. 17, 1980, at 3, col. 1. Furthermore, following submission, the Secretary of the Interior will approve or reject the plan within a certain time, which, under the earlier regulations, was six months. 30 C.F.R. § 732.13 (1979). When the Secretary extended the submission deadline in response to Permanent Surface Mining, supra note 373, he merely noted that adjustments would have to be made in the subsequent procedures and timing. Id. § 731.12. On February 11, 1980, it was announced that Texas had become the first state to have a plan approved by the Secretary. ENVIR. REP. Curr. Develop. (BNA) 2011 (1980).
from having to comply with the federal regulations and would require only compliance with the Act itself.\footnote{376. S. 1403, 96th Cong., 1st Sess. § 3 (1979). This bill passed the Senate on a 68-26 vote. See 125 CONG. REC. S12,387 (daily ed. Sept. 11, 1979).} Although passage of this bill might create substantial chaos concerning enforcement of much of the federal act,\footnote{377. This is due principally to the considerable vagueness in the federal act.} it should have little effect on the subsidence aspects as these regulations clearly follow the tenor and intent of the Act, and it is, thus, difficult to imagine the states complying with the Act without conforming to the regulations.

Where Do We Go From Here?

Because future developments in subsidence law will evolve from or within the already-existing common law and legislative contexts, this section will refer to critical factors raised in the common law and legislative discussions. This past versus future analysis requires separate consideration of each of the three basic approaches to dealing with subsidence: preventing subsidence from occurring in the first instance, preventing harm from taking place when subsidence does occur, and providing relief from harm that does take place when subsidence occurs.

Preventing Subsidence

When considering prevention of subsidence, it is necessary to review the state of the art, the costs involved, and the legal requirements. Each of these elements must be examined in the context of abandoned versus active mines.

1. State of the Art

Technologies for preventing subsidence practicable during the active mining process have been used in Europe for many years. In 1974, a major review of subsidence technologies concluded that the European methods should be adaptable to use in the United States, but further study was deemed necessary to assess their adaptability.\footnote{378. GENERAL ANALYTIC, INC., STATE OF THE ART OF SUBSIDENCE CONTROL II-76 to II-77 (1974) [hereinafter cited as GENERAL ANALYTICS].} This same review concluded that the relative effectiveness of the technologies for stabilizing the surface above abandoned mines was based on "conjecture."\footnote{379. \textit{Id.} at 1-57. "Ideally surface stabilization would permanently eliminate any subsidence movement. From a practical viewpoint, this goal is seldom achieved. Realistically, surface stabilization either reduces subsidence movements, or postpones movements until some later time, possibly far in the future." \textit{Id.} at 1-2.}

When dealing with an abandoned mine, it must be determined whether anything needs to be done as the subsidence already may be complete or arrested, the void may be of sufficient depth that no subsidence will occur, or there may be pillars sufficient to prevent subsidence.\footnote{380. For a general discussion of these categories, see GENERAL ANALYTICS, supra note 378, at 1-6 to 1-13.} While
techniques for making these determinations exist, it is necessary to know the size, shape, and continuity of the voids and the conditions and nature of the overburden, the mine pillars, and the mine floor. Similarly, in connection with active mines it must be considered whether any control efforts are needed. This determination largely will be a function of the depth of the operation.

All authorities concur that geological conditions and mineral extraction methods affect the eventuality of and the time for subsidence. Given the variable geological conditions and extraction methods present in the United States, the occurrence of subsidence will vary. Furthermore, not all mining systems can be used under all geological conditions; therefore, a uniform solution adaptable to all conditions cannot be prescribed. Consequently, the solution for preventing subsidence in an active mine is left to the individual mine owner/operator with administrative supervision. The Office of Surface Mining arrived at these general conclusions in adopting regulations to implement the subsidence control provisions of the federal Surface Mining Control and Reclamation Act of 1977, stating that viable subsidence prevention methods exist for active mine operations. Government and industry officials are reported to believe that, when possible, optimum subsidence damage prevention is achieved through total extraction mining, which allows mine roof collapse and subsequent surface development: "Longwall mining achieves the highest extraction rate with essentially concurrent overburden collapse." Obviously, however, this approach is suitable only below undeveloped areas. Thus, each mining technique has its own limitations.

381. For a discussion of surface reconnaissance, geological information, mine maps, core borings, air rotary borings, borehole photography, sonar calipers, and surface survey information, see GENERAL ANALYTICS, supra note 378, at 1-3 and 1-6. For an extensive description of how photography was used in one case to map an underground void, see Mansur & Skouby, Mine Grouting to Control Building Settlement, 96 J. SOIL MECHANICS AND FOUNDATION DIVISION 511 (1970) [hereinafter cited as Mine Grouting].

382. For a discussion of all of the relevant factors, including angle of draw, critical width-depth ratio, seam thickness, depth, vertical and horizontal displacements and strains, see GENERAL ANALYTICS, supra note 378, at II-16 to II-37.

383. Id. at I-3 to I-13.

384. See text accompanying notes 355-57 supra.


386. COMPTROLLER GENERAL ALTERNATIVES, supra note 300, at 26.

387. Id. For some time longwall mining has been the principal method use in European coal mines, but, as reported in a 1975 study, it accounts for less than five percent of U.S. production from underground mines. That same study noted, however, that this mining method was increasing in popularity because of its more continuous nature and greater percentage of recovery, and because improvements in techniques are increasing its efficiency. REPORT TO NATIONAL SCIENCE FOUNDATION, supra note 335, at 33-39.

388. For general descriptions of longwall mining and room and pillar mining, the two principal general methods of underground mining, see notes 335-36 supra. For a discussion of the various subsidence control technologies associated with active mines, such as single face advance harmonious extraction, partial extraction, panel and pillar, and backfilling, see GENERAL ANALYTICS, supra note 378, at II-46 to II-68.
The techniques for preventing subsidence from abandoned mine voids generally involve placing material in the void, either to provide added support or to eliminate the void. While several techniques exist in each category, it is difficult to draw a positive conclusion regarding the availability of adequate technology for preventing subsidence from all abandoned mines because the problem has not been thoroughly examined. Perhaps if the technique most appropriate for a given area is selected, the technology will be available to deal with all the conditions; however, this cannot be demonstrated at this time. Still, it can be argued that we should not wait for absolute scientific proof, and that where there is a chance technology will work, it is better to do something than to do nothing. If there is a possible benefit, no probable harm, and the costs are minimal, why not go ahead and do it.

2. Costs

Assuming that no harm can occur as a result of using a particular prevention technique, the argument for doing something leads to the question of costs. In enacting the federal Surface Mining Control and Reclamation Act of 1977, Congress noted that the cost solely for controlling subsidence under the 200 urbanized areas already affected by underground mining would be approximately $1 billion. In assessing the costs of the various stabilization techniques for abandoned underground mines, a 1975 review concluded that the cost of stabilizing the surface lands may even exceed the value of

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389. Id. at 1-14 & 1-24.
390. For providing added support, a recent survey reviews (1) erecting grout columns, (2) constructing piers, (3) installing deep foundations, and (4) installing grout-case, and for filling voids, it reviews (1) controlled hydraulic flushing or backfilling, (2) blind hydraulic flushing or backfilling, (3) pneumatic filling, (4) fly ash injection, (5) grouting, (6) over-excavation and backfilling, and (7) blasting. General Analytics, supra note 378, at 1-15 to 1-23, 1-57 to 1-63. For a discussion of fly ash injection, see Magnuson & Malenka, Utilization of Fly Ash for Remote Filling of Mine Voids, U.S. Bureau of Mines Information Circular 8488-93 (1970) [hereinafter cited as Fly Ash]. For a brief description of controlled flushing, blind flushing, and pumped-slurry injection, see R. Whaite & A. Allen, Pumped-Slurry Backfilling of Inaccessible Mine Workings for Subsidence Control, U.S. Bureau of Mines Information Circular 8667 (1975) [hereinafter cited as Pumped-Slurry Backfilling].
391. General Analytics, supra note 378, at 1-57. A recent report evaluating a pumped-slurry backfilling process used at Rock Springs, Wyoming, concluded: "The process was considered to hold sufficient promise to justify further experimentation." Pumped-Slurry Backfilling, supra note 390, at 15. In connection with the use of a similar process at Green Ridge, Pennsylvania, the same report concluded: "The method proved successful under the conditions of the demonstration. . . . Further use. . . . in different areas will define the range of conditions under which it is feasible." Id. at 73-74. See also note 255 supra.
392. A recent study on returning mine wastes to underground mines notes two potential hazards that must be dealt with: (1) health and safety of mine personnel and (2) ground water pollution. Report to National Science Foundation, supra note 335, at 2-3.
those lands.\footnote{General Analytics, supra note 381, at 1-57. Comptroller General Alternatives, supra note 300, at 35, identifies a cost of $22,000 per acre. It has been stated, however, that fly ash can be injected economically. Fly Ash, supra note 390, at 96.} Other studies confirm the general high expense of stabilization methods, but express some optimism that improvements in the use of the technology and expanded re-use of equipment would reduce costs considerably.\footnote{Pumped-Slurry Backfilling, supra note 390, at 75.} This belief in future cost reduction will not, however, justify an immediate across the board requirement for preventing all future subsidence from abandoned mines. It cannot be concluded that using preventive measures in active mines only involves minimal costs. Controlled subsidence methods, such as long-wall mining, are expensive and are not feasible for all mining operations.\footnote{Comptroller General Alternatives, supra note 300, at 27.} Furthermore, other preventive measures require safeguards to mitigate other risks, such as injury to employees, that will increase their costs.\footnote{See note 392 supra.} For the foreseeable future, benefit versus risk must be assessed on a case-by-case basis, but the public, rather than the owner/operator, should make these decisions.\footnote{See text accompanying notes 415-17 infra.}

To the extent that this benefit/risk assessment results in some subsidence prevention efforts being undertaken, the next question is who should bear the costs of prevention. Essentially, there are three parties who can bear these costs: coal owners/operators, surface owners, and the public. The viability of coal owners/operators bearing the cost depends to some extent on whether the mine is active or abandoned. It may not be possible to have an owner/operator of an abandoned mine bear the cost because such a person or entity may no longer be in existence\footnote{See text accompanying note 82 supra.} or it might not be constitutionally permissible.\footnote{See Anderson & Anderson Contractors, Inc. v. Latimer, [1979] 13 Envir. Rep. Dec. (BNA) 1697 (W., Va. 1979) (the court discusses the effect of retroactively changing reclamation standards on permittees).} The only feasible method may be the approach used in the federal Surface Mining Control and Reclamation Act of 1977, which imposes a fee on each future unit of mined coal and uses the receipts to establish a fund for a variety of reclamation purposes, including subsidence control.\footnote{Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. §§ 1231-32 (Supp. I 1977).}

When dealing with active mines, it is more practical to impose the costs on the mine owners/operators, at least initially. The question remains, however, to what extent the owners/operators will in fact bear the costs or to what extent the costs will be passed on to the coal consumers. To the extent that miner's costs are passed on to their consumers, who are electric utilities, the utilities in turn may pass the costs on to the users of electrical energy. This would result in higher prices for the goods and services produced by the
users of that energy and the need for the public to subsidize certain home owners and apartment tenants who cannot absorb that added expense.

Surface owners and the public—at least to the extent that the public is the surface owner in subsidence areas such as where schools and roads are located and to the extent that the tax base of the subsided property is less than that of the property in an unsubsided condition—have borne much of the cost of subsidence from abandoned mines. If they are to continue to bear the cost of the damage, it may be desirable for them to undertake the cost of preventing subsidence in some instances. The key however, is, that the decision in each situation should be made by those directly affected. Thus, a school district which discovers that one of its schools overlies an abandoned mine should have the opportunity to undertake a subsidence prevention project or, if an active mine lies underneath the school and it cannot constitutionally prevent mining from occurring, the school district should have an opportunity to purchase adequate support from the mineral owner.

3. Legal Requirements

Pursuant to the provisions of the 1979 Illinois Surface Coal Mining Land Conservation and Reclamation Act, which implement the requirements of the federal Surface Mining Control and Reclamation Act of 1977, steps will be taken in active mines to prevent subsidence. However, neither the federal law nor the federal regulations promulgated thereunder prescribe the specific methods that must be employed. In view of the variability of geological conditions, subsidence control methods and costs, it was not appropriate at this time for the law to specify prescribed methods of operation for subsidence prevention. Technology suggests that some areas will not subside largely because of the depth of the excavations; therefore, it should not be necessary to require prevention methods to be used across the board. Furthermore, benefit versus cost analysis should allow other areas to be excluded from mandatory use of prevention methods.

It is not clear whether the "structures or renewable resource lands" standard adopted pursuant to federal regulation is appropriate for determining

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402. See note 4 supra.
404. In a project undertaken in Belleville, Illinois, a building began to settle and crack during construction after it was 70% completed and a mine void was discovered below. Mine Grouting, supra note 381, at 511.
408. See text accompanying notes 381, 389, 390 & 394 supra.
409. See text accompanying note 382 supra.
410. See text accompanying notes 393-405 supra.
when subsidence control plans should be required. 411 At a minimum, the logical future development of established communities should be considered because the extension of existing communities into previously mined areas has resulted in much damage from subsidence. 412 Unfortunately, the Illinois Act appears to give no independent authority to the Illinois Department of Mines and Minerals because a purpose of the Act is "to establish requirements that are no more stringent than those required to meet" the federal act. 413 Because it is not clear what will happen if the federal Act is repealed, the Illinois Act should be amended to at least give independent regulatory authority to the department in such an event.

A straightforward legislative prohibition against causing subsidence from active mining operations, however, will not necessarily put an end to subsidence. Despite a Pennsylvania law prohibiting subsidence from active mines, 414 on the books since 1966, a recent report of the Comptroller General notes that substantial subsidence still occurs in Pennsylvania, resulting in the recovery of damages for failure to meet the statutory duty. 415 Perhaps coal operators are paying subsidence claims as a cost of doing business, rather than use more expensive subsidence prevention technology. While such an approach may be sufficient to protect the interests of individual surface owners, it does not protect the public interest in the integrity of the surface. 416 Therefore, legislative proscriptions of subsidence need to include full regulatory authority, including inspection powers, and such sanctions as injunctive relief and civil and criminal penalties in order to see that subsidence prevention technology is employed. Even then, success cannot be expected unless the enforcing agency actually performs its duties.

Because the federal Surface Mining Control and Reclamation Act of 1977 specifies that abandoned mine reclamation funds can be used for mine subsidence prevention, 417 and because the 1979 Illinois Abandoned Mined

411. See text discussion at notes 343-50 supra.
412. See text discussion at note 5 supra.
413. P.A. 81-1015, § 1.02(c), 1979 Ill. Legis. Serv. 2626 (West).
415. It has been reported that 264 Pennsylvania property owners were paid $1.1 million in damages between 1966 and 1977. Comptroller General Alternatives, supra note 300, at 12.
416. See text accompanying notes 364-67 supra. The Comptroller General's recent report identifies Illinois and Pennsylvania as the two states with the most widespread subsidence problems. Comptroller General Alternatives, supra note 300, at 8-15. Nationally, "in excess of $1 billion" in structural damage is projected to occur in the period 1973 to 2000, with about $30 million annual subsidence damage to structures, including $10.8 million annually to school buildings and $2.7 million annually to roads, utilities, and services. Id. at 6-7. In addition to structural losses, farmland loss could include livestock killed, usable grazing land or cropland, alteration of drainage patterns and damage to water supplies. Furthermore, where structures are involved there are dislocation losses. Land value is depreciated, and there can be impact on economic growth if a community does not have an area into which it can safely expand. Id. at 7.
417. See text accompanying note 244 supra.
Lands and Waters Reclamation Act does not so specify, the regulations promulgated pursuant to the Illinois Act should clarify this issue. It also should be noted that any prevention project must fit within the priorities established by Congress, as reflected in the Illinois Act and accompanying regulations. In view of the costs of subsidence prevention projects, the many reclamation problems that exist as a result of abandoned mine lands, and the limited funds available, this is a proper approach. However, as the more serious and more cost-efficient reclamation problems are solved and funds still remain available, subsidence prevention projects may well be undertaken. The abandoned mine reclamation fund program is intended to be a long range program. Therefore, comprehensive planning for the future should begin now and one element of these plans must be subsidence prevention from abandoned mine lands.

**Preventing Harm**

Because it is possible that not all subsidence can be prevented and it certainly is true that not all subsidence will be prevented, it is necessary to consider measures for preventing harm when subsidence occurs. The four techniques for preventing harm from occurring when subsidence takes place are: (1) constructing buildings that will be resistant to subsidence damage; (2) shoring up or reinforcing existing buildings prior to subsidence damage occurring or to prevent further subsidence damage; (3) limiting, through land use planning controls, the placing of structures above undermined areas prone to subsidence or areas due to be undermined; and (4) relocation of surface moveables. These techniques would be particularly important where planned subsidence is intended and the mine owner/operator does not own the surface. All four techniques essentially relate to preventing harm to structures, and, although methods (1) and (2) indirectly relate to

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418. See text accompanying notes 213-15 *supra*.
419. See text accompanying notes 231-40 *supra*.
420. See notes 396-97 *supra*.
423. This technique currently is required for buildings in many earthquake and floodplain zones. Measures may include use of concrete slabs, independent building units with releveling jacks and gap provisions, and small box form houses. COMPTROLLER GENERAL ALTERNATIVES, *supra* note 300, at 34-35.
424. Measures may include trenching and filling with compression material, cutting buildings and walls to relieve tension, tapping large windows, using arch supports and wall shoring, and reinforcing or jacking. *Id.*
425. Measures may include zoning and subdivision regulations, public improvements, and tax incentives. *Id.* at 34.
426. 30 C.F.R. § 784.20(b)(iii), (iv) (1979).
maintaining the integrity of the surface in that the surface will be usable for such buildings, all of them assume subsidence will occur.

Questions arise, however, as to who will pay for the added construction costs incurred to prevent damage and who will pay for the costs of reinforcing or moving existing structures. Perhaps requiring new construction standards would be the most difficult approach in assessing some of the costs to the mine owner/operator. Under the present federal scheme, it is clear that abandoned mine reclamation funds can be used for shoring up existing buildings, at least in emergency situations.427 Because Illinois regulations relating to the expenditure of abandoned mine reclamation funds have not yet been promulgated, the opportunity exists to specifically address this issue. If measures to prevent harm are to be undertaken in areas of abandoned underground mines, these areas must be identified428 and a determination must be made about the likelihood of subsidence occurring in that area. Both private and public funds would be wasted if monies were expended for reinforcements where none were needed. Similarly, it would be nonproductive to enact subsidence-related land use controls for areas where subsidence is unlikely to occur. The federal regulations leave measures to prevent harm from active mines to be developed in the mine operator's subsidence control plan.429 This approach should place the financial responsibility for such measures on the coal owner/operator, depending on how rigorously the regulatory authority evaluates subsidence control plans. Such financial responsibility is important because abandoned mine reclamation funds cannot be used to prevent subsidence from active mines.430

Because these measures for preventing harm from subsidence serve the secondary public purpose of preventing widespread economic losses and dislocation, they are legitimate regulatory tools and the Illinois regulations will need to provide for their implementation. It should be clear, however, that because these measures do not relate directly to the primary public purpose of maintaining the integrity of the surface, they must receive a role secondary to preventing subsidence.

Relief from Harm

Because subsidence from previously mined land and from active mines will continue to occur in the foreseeable future, and because measures to prevent harm when subsidence occurs will not be fully effective, it is necessary to consider the relief that is and should be available to the surface owner or tenant who suffers harm. The question can be viewed in the larger sense of who will bear the costs of that harm as among the taxpayers, coal

427. This apparently includes reimbursing building owners who expend funds for such measures in the emergency situation. U.S. to Reimburse Energy Family $1,500 Spent on Mine Sink Damage, SOUTHERN ILLINOISAN, Aug. 23, 1979, at 3, col. 1. See note 245 supra.
428. See text accompanying notes 3, 68-70 supra.
430. See note 212 supra.
owners/operators, and surface owners/tenants. In addition to leaving the entire burden on the surface owner, three different approaches can be considered: reimbursing the person harmed for his or her damages; requiring the wrongdoer to reclaim or rehabilitate the land or structures; and providing low cost loans to the person harmed.

The person harmed can be reimbursed for damages by coal mine owner/operators, the government, or private insurance. Because Illinois common law places an absolute duty on the owner of the mineral estate to provide subjacent support for the surface in its natural state, it would seem that persons suffering harm should obtain relief from the coal mine owner/operator. Two primary problems have developed, however, in enforcing this duty. First, the Illinois courts have held that the surface owner can waive the right to recover for breach of this duty, and the waiver is binding on subsequent surface owners if it is so intended by the parties to the initial waiver. In effect then, the duty itself can be waived permanently. This approach assumes that the duty is owed only to the surface owner and not to the surface itself or to the public. Considering that sixty-five percent of Illinois is underlaid with coal, surface owners above this coal could conceivably waive the duty of surface support and thereby subject the people of Illinois to an intolerable future. Second, subsidence usually occurs long after mining and, therefore, even if liability has not been waived, it is unlikely that there now exists a defendant from whom damages can be recovered. These two problems have been aggravated by judicial opinions declining to hold successors-in-interest to coal deposits responsible for the conduct of prior owners.

In view of these two general problems with the Illinois common law and the heightened public interest in subsidence problems, the Illinois legislative efforts have been directed toward making insurance available to surface owners. As the insurance program is rather new, it will be some time before its adequacy can be judged. A recent report noted, however, that in Pennsylvania, where subsidence insurance has been available since 1961, only about three percent of the eligible homeowners carry insurance. Although past and present studies have helped locate many abandoned underground mines, the General Assembly needs to allow this information to be widely disseminated to provide for any future efforts necessary to obtain the most comprehensive data possible on abandoned underground mines. The legislature should not rely on insurance companies to develop this information in their efforts to convince surface owners to purchase subsidence insurance. A surface owner should be able to go to the

431. See text accompanying notes 10-34 supra.
432. See text accompanying notes 108-22 supra.
434. See text accompanying notes 55-82 supra.
435. COMPTROLLER GENERAL ALTERNATIVES, supra note 300, at 12.
436. See note 3 supra.
county courthouse and, with a minimum of effort, determine whether there is a past or present underground mine beneath the surface or in a reasonable proximity. 437 In addition, the legislature should consider the Pennsylvania law requiring surface grantors to explicitly notify their grantees as to whether the surface has protection against subsidence. 438 If owners know that they do not have recourse against the mine they may be persuaded to acquire insurance.

Although the provisions of the 1979 Illinois Surface Coal Mining Land Conservation and Reclamation Act and the federal Surface Mining Control and Reclamation Act of 1977 impose a duty on the mine operator to prevent subsidence, and a breach of that duty may result in damages owed to those who suffer harm, the duty exists only where it is technologically and economically feasible to prevent subsidence. 439 Because of this lack of comprehensiveness, the Illinois General Assembly should declare that future waiver clauses are contrary to public policy and should impose upon future purchases of coal liability for subsidence resulting from mining operations conducted by previous owners of that coal. In the alternative, the legislature could enact a law similar to the 1966 Pennsylvania Act that prohibits subsidence from active mines beneath structures and states that failure to meet this statutory duty will result in damages owed to those who consequently suffer harm. 440 A bonding requirement would help assure that adequate funds are available for such damage payments.

While the federal regulations contain provisions for surface owner protection, 441 they provide for, but do not require, rehabilitation as an option. Thus, a mine operator can discharge its duty to the surface owner through the purchase of an insurance policy. 442 Because rehabilitation is consistent with the primary public interest of maintaining the integrity of the surface, it may be necessary to give more detailed consideration to the feasibility of requiring rehabilitation in given situations.

Finally, Illinois law does not provide for low cost loans to assist those suffering damage. At a minimum, therefore, the Illinois General Assembly should consider a provision similar to the Pennsylvania law, which allows special funds to be used to temporarily relocate people whose homes are destroyed and to aid these people in effecting repairs. 443

437. Perhaps mapping and notice provisions under the federal Surface Mining Control and Reclamation Act of 1977 will prove sufficient as far as active mines are concerned. In part this will depend on the permanency and future availability of those maps and notices. See 44 Fed. Reg. 15, 440 (to be codified in 30 C.F.R. § 817.122).
439. See text accompanying note 334 supra.
442. Id. § 817.124(c).
In 1880, the Illinois Supreme Court, in *Wilms*, established an absolute right to subjacent support in the surface owner, a right inherent in the bundle of rights called ownership and, therefore, entitled to substantial protection in the courts. A period of strict enforcement of this right followed. Beginning with decisions in 1923 relating to waiver of the right and followed by decisions in 1963 relating to the liability of successors-in-interest to coal or coal mines, the Illinois courts began to deviate from the substantial-protection standard. This can be attributed at least in part to the failure of the courts to consider the public interest in the integrity of the surface. Recent legislation at the state and federal levels of government have addressed the public concern over subsidence. Programs established under this legislation will do much to give protection to those who were left without recourse as a result of the court decisions. In addition, if faithfully implemented, the legislative mandates will help return Illinois to a strict enforcement of the basic right first enunciated in *Wilms*. 