halt a cross-country motorcycle race through a state reserve. Or a case may pose a "zero-infinity" problem — release of a particular chemical or gene-altered organism may have only a small possibility of negative effects, but if they occur they may be catastrophic. As a result, the common law abdicated all such issues to the tender mercies of public authorities. There are signs, as in Judge Ryan's concurrence in *Wilsonville*, that the situation is changing. See Sharp, Rehabilitating the Anticipatory Nuisance Doctrine, 15 B.C. Envtl. Aff. L. Rev. 627 (1988).

4. **Other equitable actions.** The present focus on equitable remedies should not obscure the fact that although equity is usually employed to supply remedies for common law or statutory causes of action, some causes of action are themselves based on the traditional equity jurisdiction. Substantive equitable claims thus may have environmental importance in cases involving fraud, bankruptcy, and trust law. Does equity embody a creative free-floating cause of action? In other words, can a judge issue an injunction whenever she is convinced that a wrong is occurring? Conventional wisdom holds rather that plaintiffs must show injury to a legal right.

5. **Restoration remedies.** Modern environmental cases have brought new and expanded currency to the old remedy of restoration. The restoration concept has great environmental utility, but raises some knotty problems. When and for what kind of case are injunctions or damages based on restoration justified and desirable? Note the potency of the restoration remedy in *Schenectady Chemical* and *Wilsonville* where defendants were forced to remove polluted soils and restore the land. In the right settings, restoration can serve not only to restore the "status quo ante"[30] but also to protect human and ecological safety, and powerfully to deter. In deterrent terms, defendants face the prospect that ill-gotten profits quickly can be dwarfed by the costs of restoration. In a Michigan case, a neighbor, after the plaintiff refused to sell him part of her rural land for a subdivision project, "accidentally" destroyed plaintiff's private arboretum, clearcutting five acres of exotic imported trees. The defendant admitted the wrongful act but argued that damages were purely nominal since he had actually *improved* the plaintiff's development-based market value (a similar claim was made in *Borland*). Though the case never resulted in a reported decision, consider the abrupt change in defendant's position that occurs when a court allows consideration of restoration remedies, for example, a restoration order requiring replanting equivalent mature trees. See Verdiccio, Environmental Restoration Orders, 12 B.C. Envtl. Aff. L. Rev. 171 (1985); Cox, Reforming the Law Applicable to the Award of Restoration Damages as a Remedy for Environmental Torts, 20 Pace Envtl. L. Rev. 777 (2003) (arguing for broader availability of such awards coupled with application of equitable trust principles that could ensure awards are used for restoration and not mere enrichment of plaintiffs).

Equitable restoration orders tend to rehabilitate natural values that would be excluded from the usual monetary interests balanced in legal actions. Consider the effect of an order requiring Allied to cleanse the polluted sediments of the James River and

30. One of the traditional aims of legal damages and equitable orders has been to return innocent plaintiffs to the position they had held before the wrongdoing.

Chesapeake Bay or Atlantic Cement to reclaim its cement dust. Restoration provides a compelling deterrent in a variety of environmental settings, such as the killing of fish in a river, the wrongful partial demolition of a historic building lacking market value, and so on. The prospect of forced restoration is a powerful deterrent to discharge of toxics: Thousands of dollars can initially be made or saved by disposing of hazardous wastes carelessly, but the subsequent cost of retrieving and removing those toxics from soil and water can be geometrically more expensive, running into hundreds of thousands or millions of dollars. If you might be caught, it is far cheaper to treat and dispose of chemicals properly at the outset when you have them in one place than to recapture them after they have dispersed and percolated through a mile or more of underground gravel aquifer.

Restoration, however, may be impossible or so grossly expensive that it makes no sense. How does a court decide when to order restoration? In a Louisiana case, a court noted that the polluted property was a swamp, subject to overflowing by the Mississippi River, used seasonally for grazing, hunting and fishing:

> Its value was set at $375 per acre, or slightly over $200,000 for the 550 acres affected.... The restoration of the property, according to plaintiff's witness, would take about seven years, involve the use of 100 trucks running continuously during that time and would cost $170 million. Ewell v. Petro Processors, 364 So. 2d 604, 608 (La. Ct. App. 1978).

The *Ewell* court understandably denied the restoration, instead merely awarding the difference in market value, a remedy that left all the toxins in the ground and groundwater. The judge may have suspected that plaintiffs were using a restoration injunction claim to extort a hefty cash payoff from the defendants or, if restoration damages were granted, might not actually spend them on restoration. Some case law makes likelihood of actual restoration a consideration in the decision. Puerto Rico v. S.S. Zoe Colocotroni, 628 F.2d 652, 676 (1st Cir. 1980). Should courts presume that market value ($375 per acre in *Ewell*) sets an appropriate maximum remedy?

The Restatement (Second) of Torts §929(1)(a) prescribes, as to measure of damages:

> for harm to land resulting from a past invasion and not amounting to a total destruction of value, the damages include compensation for (a) the difference between the value of the land before the harm and the value after the harm, *or at plaintiff's election in an appropriate case, the cost of restoration that has been or may be reasonably incurred.*... (Emphasis added.)

In Escamilla v. Asarco, Inc., a restoration case lying in the grey area between equitable remedies and damages, the court ordered a remediation of the top 15 inches of soil in Globeville, a low-income, working class, ethnic minority community in northern Denver contaminated with arsenic and cadmium, even though the cost of restoration was far in excess of market value losses. Applying Restatement §929, the court held:

> If the damage is reparable, and the costs, although greater than original value, are not wholly unreasonable in relation to that value, and if the evidence demonstrates that payment of market value likely will not adequately compensate the property owner for some personal or other special reason, we conclude that the selection of the cost of restoration as the proper measure of damages would be within the

> limits of a trial court's discretion.... It is precisely because the market value measure may not adequately compensate land owners that the remediation measure may come into play.
>
> It was undisputed that full use of the property can be restored simply by removing and replacing the contaminated topsoil.... The jury found that it would cost $20,125,000 to remediate Plaintiffs' properties. The jury found that Plaintiffs' properties suffered a diminution in market value of $4,159,000,...the jury found the uncontaminated market value of Plaintiffs' properties to be approximately $17.5 million, and the contaminated value to be approximately $13.4 million. Thus, the remediation costs exceed not only the diminution in market value, but also both the pre- and post-tort market values themselves.... This excess does not necessarily preclude remediation, but does require me to consider carefully whether the remediation costs are "wholly unreasonable" in relation to the properties' market values.... Relative to the total uncontaminated market value..., the excess represents only 13 percent of the total market value,...only $4,600 per class family.... Under all of the circumstances of this case, I cannot say that the remediation costs are "wholly unreasonable" in relation to the market value.
>
> Considering all the factors..., and with due regard for the overarching principles of full and just compensation on the one hand, but no windfalls on the other, I find and conclude: that the losses which Plaintiff class members have suffered to their residences as a result of Defendant's negligence are remediable; that the cost of that remediation, as found by the jury, is not wholly unreasonable in relation to the uncontaminated or "pre-tort" market value of the Plaintiff class members' residences; that the market value measure will not adequately compensate Plaintiff class members for the damage to their residences; that there is no significant risk that the Plaintiff class will be overcompensated by a remediation award,...or that such an award will encourage wasteful expenditures by Plaintiff class members; and therefore that the jury's remediation award is the more appropriate measure of damages to compensate Plaintiff class members for their property losses.… Escamilla v. Asarco, Inc. (D.C. Denver, Colorado, No. 91 CV 5716, Apr. 23, 1993).[31]

When should restoration be ordered? Neither the *Escamilla* court nor the Restatement require a showing of special circumstances, but some special showing seems appropriate. A Florida wetlands case set out some guidelines for restoration orders: To establish that restoration is appropriate, "the selected plan must: (1) confer maximum environmental benefits, (2) be achievable as a practical matter, and (3) bear an equitable relationship to the degree and kind of wrong which it is intended to remedy."[32]

It would seem important to consider the proportionality between potential land uses and the costs of "Cadillac cleanups," to avoid overreactions in excessive remedies, while acknowledging the array of values beyond market values that restoration can incorporate — protecting community integrity, protecting individual autonomy, recreating natural economy values and human-specific values, punishing malicious actions,

31. After this decision, Asarco decided to settle. In the settlement, the plaintiffs agreed to allow the defendant itself to do most of the supervised remediation (i.e., the equivalent of an injunction to restore), reducing the defendant's cost to as little as $11 million (the jury's award of $8 million for "discomfort" was raised to $11 million).

32. United States v. Weissmann, 489 F. Supp. 1331 (M.D. Fla. 1980); the court included an extensive analysis of the values of wetlands. Because the Corps was plaintiff, no showing of plaintiff's circumstances was relevant; Escamilla merely had required a showing that land had been used personally by the plaintiff.

vindicating the innocence of victimized plaintiffs by restoring them as much as possible to their status quo ante in a manner that market value compensation does not achieve.[33] Standards for when and how restoration is to be adopted as a remedy undoubtedly will continue to evolve in environmental law.

6. **Restoration and other injunctive relief as legalized extortion.** Echoing the judge's suspicions in the *Ewell* case, the potential for extortionate injunctions is a topic increasingly recognized by legal scholars. By asking for restoration injunctions or other remedies that would impose large costs on the defendant, plaintiffs may be seeking to set up an extortionate bargaining position for settlement negotiations. In their article "Threatening Inefficient Performance of Injunctions and Contracts," Ian Ayres and Kristin Madison draw attention to this problem, arguing that it produces inefficiency in the form of negotiation costs, failures to reach a bargain, and inefficient ex ante actions. The article considers legal reforms that could undercut extortionate injunction threats by giving defendants two options: an option to make any injunctive relief inalienable and an option to commit to paying higher damages. Ayres and Madison argue that these options would eliminate the threat of undercompensation while reducing the inequitable risk of overcompensation and extortion. Ayres & Madison, Threatening Inefficient Performance of Injunctions and Contracts, 148 U. Pa. L. Rev. 45 (1999).

Section 2. **DAMAGES**

a. **Compensatory damage remedies — past damages**

The typical tort plaintiff seeks an award of compensatory damages for past injuries, whether or not an injunction is also being sought. Unlike injunctive relief, compensatory damages follow automatically upon a finding of defendant's liability. Compensatory damages can include sums awarded for all forms of property damage, injuries to the plaintiff's health, loss of consortium, and so on. In *Boomer*, there was little dispute about the amount of damages awarded for past harms. Damages included injury to stored automobiles and other personal property, and, as to real property, the "loss of rental value or loss of usable value," averaging $60 per plaintiff per month. Imputed rental value attempts to gauge the burden imposed by pollution upon the lives of the plaintiffs, assuming that the amount of rent that people would be willing to pay adequately captures the sum total of life-quality values involved. Does it?

Compare the elements of damage allowed in *Boomer* to those found in the typical personal injury lawsuit. In the latter, the plaintiff's recovery is generally made up of two broad categories: (1) compensation for monetary losses such as lost wages, medical

33. The Florida Supreme Court found that damages measured by diminution in value were inappropriate to compensate the municipality for the loss of five of its six water wells. The court stated that, in this instance, public policy supported restoration costs as the measure of damages because the court was "dealing with the single most necessary substance for the continuation of life.... Any danger to that primary necessity is ecologically and humanly unacceptable." Indicating that it thought it was diverging from the general rule on damages for wrongful injury, the court stated that extending damages beyond the loss of value of the property was further justified in this case because neither overcompensation nor overlapping of recoveries was likely. Davey Compressor Co. v. Delray Beach, 7 Toxics L. Rep. 97 (Mar. 3, 1994). The *Escamilla* court declined to consider punishment as a reason for a restoration remedy, but because punitive and deterrent considerations issues traditionally can be weighed in equitable balancing, they would seem to be appropriate here as well.