## NC General Shell

Text: Developing countries should recognize a private property right in natural resources.

# Resource Links

## Water

(:12)

Riparian landowners have a private property right over watercourses.

**MAF 13** writes[[1]](#footnote-1)

When responding to issues involving a natural watercourse, the courts often take the position that "water flows naturally and should be permitted thus to flow". **If you own land on one or both sides of a** natural **watercourse, you are considered** to be **a riparian landowner**. A non-riparian land owner does not have land abutting a natural watercourse. The following questions are addressed in this section: What is a natural watercourse? How do I know whether the area on my land would be considered a natural watercourse? What are the rights and responsibilities of a riparian land owner? What are some common problems or disputes involving natural watercourses? What is a natural watercourse? A natural watercourse is a natural channel where water flows between banks that are more or less defined. The flow of water does not need to be constant, but the channel must be a permanent landmark. The watercourse may also, at some point, spread over a level area without defined banks, before flowing again as a defined channel. A natural watercourse How do I know whether the area on my land would be considered a natural watercourse? **Only a judge can conclusively determine whether**, under the law, **a specific flow of water is a** natural **watercourse or not**. Many people have opinions, and here are some guides or suggestions for evaluating the watercourse on your land: **The channel must be** a **permanent**, natural feature on the land. A man-made ditch is not a natural watercourse. The courts may or may not consider a natural watercourse that has been modified in the past to still be considered a natural watercourse; **Water flows through a channel that has a bed and banks**. If the water spreads out from the banks at some point, it must eventually flow back into a defined channel with banks and a bed; The water **flow** in a natural watercourse does not have to be continuous, but **must be significant**. If water only flows after a heavy rain, it may not be a natural watercourse even if it has defined banks. What are the rights and responsibilities of a riparian landowner? The following is a general summary of the rights and responsibilities of riparian landowners. The law concerning riparian rights and responsibilities is complex, and cannot be easily summarized. Please consult your lawyer where these rights and responsibilities affect your property or a neighbouring property. Right of drainage **Riparian landowners have the right to drain their land into the** natural **watercourse, even if it causes damage to downstream property owners.** Non-riparian property owners do not have the right to drain into natural watercourses, and the connecting non-riparian landowner could be liable for damages if downstream damages result.

## Forests

(:30)

Private property rights are key to sustainable forestry. Government regulations can’t solve.

**Diamond 5** writes[[2]](#footnote-2)

Aloysius now had a new job, working for a non-governmental organization concerned with tropical deforestation. In the tropics of Southeast Asia and Pacific islands, large-scale logging is carried out mainly by international logging companies whose subsidiaries are in many countries but whose home offices are mainly in Malaysia, and also in Taiwan and South Korea. They operate by leasing logging rights on land still owned by local people, exporting unfinished logs, and not replanting. Much or most of the value of a log is added on by cutting up and processing it after it has been felled: that is, the finished timber sells for far more than the log from which it was cut. Hence exporting unfinished logs deprives local people and the national government of most of the potential value of their resource. The companies frequently obtain the required government logging permit by bribing government officials, and then proceeding to build roads and cut logs beyond the boundaries of the area actually leased. Alternatively, the companies merely send in a logging ship, quickly negotiate permission with local people and carry out the logging, and dispense with a government permit. For example, about **70% of** all **wood cut in Indonesia comes from illegal operations** that cost the Indonesian government nearly a billion dollars a year in lost taxes, royalties, and lease payments. Local permission is obtained by wooing village leaders who may or may not have the power to sign away logging rights, and by taking those leaders to the national capital or else overseas to Hong Kong, where they are plied with luxury hotel accommodations, food, drink, and prostitutes until they sign. This sounds like an expensive way to do business, until one realizes that a single big rainforest tree can be worth more than $10,000 [is that the value of a big dipterocarp?]. **Acquiescence of the ordinary village** population **is bought by paying them** an amount of **cash** that seems to them enormous but **will** actually **be spent on** food and other **consumables within a year**. In addition, **the company also obtains** local **acquiescence by making promises that will not be carried out, such as a promise to replant the forest and build hospitals.** In some well-publicized cases in Indonesian Borneo, the Solomon Islands, and elsewhere, when loggers have arrived at a forest with a permit from the central government and started logging, local people who realized that this would be a bad deal for them attempted to stop the logging by blocking roads or burning sawmills, whereupon the logging company enlisted the police or army to enforce their rights. I had heard that **logging companies also intimidate opponents by threatening to kill them.** Aloysius was such an opponent. The loggers did threaten to kill him, but he persisted because he was confident that he could take care of himself. They then threatened to kill his wife and children, who he knew could not take care of themselves, and whom he would not be in a position to protect whenever he was away at work. To save their lives, he moved them overseas to another country and became more vigilant about possible murder attempts on himself. That explained his new nervousness and loss of his former happy confident manner. With such logging companies, as with the mining companies that we already discussed, we have to ask ourselves **why they behave in a way that is morally reprehensible**. The answer, again, is that their behavior is profitable to them because of the same three factors motivating mining companies: economics, the industry’s corporate culture, and attitudes of society and government. **Tropical hardwood logs are so valuable** and in demand **that rape-and-run logging of leased** tropical forest **land is immensely profitable**. Acquiescence of local people can frequently be obtained, because the local people are desperate for cash and have never seen the disastrous consequences that clearcutting tropical rainforest brings to local land-owners. (One of the most cost-effective ways by which organizations opposed to tropical rainforest logging have induced landowners to refuse permission is by taking them to already- logged areas to talk with regretful land-owners and to see for themselves). **Officials in the government Forestry Department can** often **be bribed, lack** the **international perspective and financial resources of** the **logging companies, and may not realize the high value of finished timber. Under those circumstances, rape-and-run will continue to be good business** until the companies start to run out of unlogged countries, and until national governments and local land owners are prepared to refuse permission and are able to muster superior force in order to resist unpermitted logging backed by force. **In other countries**, notably western Europe and the United States, **rape-and-run** logging **has become** increasingly **unprofitable**. In contrast to the situation in much of the tropics, western European and American virgin forests have already been cut or are in steep decline. **Large logging companies operate on land that they own** or else hold by long-term lease **rather than short-term lease, giving them an economic incentive for sustainability. Many consumers are sufficiently aware environmentally to care whether** the **wood products that they are purchasing have been harvested in destructive** nonsustainable **ways**. Government regulation is sometimes serious and restrictive, and government officials are not readily bribed.

(:13)

Private property rights are key to sustainable forest management.

**Namaalwa 8** writes[[3]](#footnote-3)

**An important reason for** the **massive degradation of** natural **resources in developing countries is** a **lack of** well-defined and **secure property rights** (Ostrom, 1999; Panayotou, 1993; Pearce and Warford, 1993). In a discussion of deforestation, Wardell et al.(2003:10) concluded that **property rights should be developed to reduce open access to forest land** and to establish competitive markets; “National governments and official development aid institutions should increase efforts to overcome transaction costs and implement closing of open access to forests, particularly through land reform and decentralization projects”. According to the property rights school, **privatization** of natural resources among potential users **will lead to efficient use and allocation through market forces** as it provides resource owners with incentives to undertake required investments to improve resource conditions (Demsetz, 1967). Hardin (1968) further argued that privatisation of renewable natural resources is the only feasible way to assure sustainable exploitation rates. This follows from the fact that private property combines both exclusivity and transferability (Randall, 1975). **One owner depending on the revenue** from such ownership **would** under most circumstances **see to it that the resource is not depleted**. For example, **private ownership has been a successful forest management regime in many** core **capitalist countries** (Beach et al., 2005; Karppinen, 1998).

Sweden proves. Private property rights are key to forest conservation.

**Pennington 5** writes[[4]](#footnote-4)

In this framework, free-market environmentalism has made a strong case for much greater use of private-property rights and “imperfect” market processes as an alternative to the regulatory state. Authors such as Terry Anderson and Donald Leal (2001) have documented numerous examples of environmental goods that can be and are supplied successfully in private markets, and empirical researchers examining state-centered models of environmental management have highlighted numerous cases of government failure. **For** land-based environmental assets such as **forests and minerals,** for example, **evidence suggests that private-property solutions are highly successful in generating** the necessary **incentives that encourage resource conservation and help** to **overcome** the problems of **“free riding”** associated with open-access conditions (De Alessi 2003). Thus, the record of **forest management in Sweden under a predominantly private regime has been noticeably more impressive than** the record of **forest management under government ownership in the U**nited **S**tates, Canada, and Great Britain. Similarly, the private ownership of wildlife in countries such as Botswana has had markedly more success in protecting stocks than government-sponsored trade bans on ivory products that have been put in place over much of Africa (Sugg and Kreuter 1994).

## Fish

Private property rights solve overfishing by averting a tragedy of the commons.

**Adler and Stewart 14** write[[5]](#footnote-5)

For most of the 20th century, the world’s ocean **fisheries provide**d **a** classic example of what Garrett Hardin famously called **“**the **tragedy of the commons**.**”** Hardin postulated an open access commons, specifically a grazing pasture owned by none but available to all. (He could just as easily have written of a marine fishery.) As Hardin explained, each herdsman can capture the full benefit of adding an additional animal to his herd using an open access resource while the cost to the pasture (overgrazing) is shared among all users. As a consequence, each individual herdsman lacks the incentive to exercise consumptive restraint, which leads to overconsumption. Thus, **in an open access commons, the shared resource is overexploited and** eventually **will collapse**. The incentives for fishermen to exploit a common fishery are analogous. Ocean fish have long been considered common property. **Fish** that are in the waters **today may not be there tomorrow. This** uncertainty **creates the incentive to catch as many fish** today **as possible because every fish left in the ocean** for tomorrow is one that **got away**. Because each fisherman reaps the full benefit of his catch, he has every incentive to add boats, crew, and more efficient gear and equipment to intensify his effort and land more fish. The costs to the fishery, however, are borne by all. The result is an overfished and overexploited resource. **Hardin’s** theoretical **“tragedy” has been confirmed by** the **evidence. Many** of the world’s **fisheries are in danger from overexploitation** and risk collapse **despite substantial regulatory efforts**. The “tragedy of the commons” is not inevitable, however. As Hardin himself recognized (but many commentators continue to overlook), **private property** limits access to the commons and **ameliorates the** commons **tragedy because property owners have** a **substantial incentive to maximize the value of the resource they own**. Many believed that individual property rights were unsuitable to the marine context because of the mobility and migration of fish and the difficulty in monitoring property interests in the open sea. **Fisheries have traditionally been held in trust by the government** for the common use of all**, relying** up**on** government **regulation to conserve the commons** and avert the tragedy of depletion and collapse. Yet it appears that the difficulties of adopting property rights in fisheries were exaggerated—as was the efficacy of command-and-control regulation. There is growing recognition that **property-based management can conserve marine resources where conventional regulatory measures failed.**

Regulations exacerbate overfishing. **Adler and Stewart 14** write[[6]](#footnote-6)

**Conventional** fishery **regulation has been unable to ensure** resource **sustainability.** Worse, **traditional** regulatory **measures often encourage economically wasteful and ecologically harmful fishing practices**. In its 2010 assessment, the United Nations Food and Agriculture Organization reported that approximately 85 percent of the world’s fish stocks (for which assessment information is available) are fully exploited (53 percent), overexploited (28 percent), depleted (3 percent), or recovering from depletion (1 percent). Recent research suggests that the status of unassessed fisheries is even worse. Thus, although annual fish production continues to rise—largely from the expansion of aquaculture— many fisheries are in trouble. The failure of fishery management “is entirely manmade,” notes University of Iceland economist Ragnar Arnason. “It is the result of an inappropriate institutional framework” governing fishing. For decades, government agencies adopted increasingly stringent control measures in an effort to limit overconsumption of fishery resources. These measures included time and area closures; limits on the types of gear and boats that could be used; and total limits on the amount of fish that could be caught in a given fishery in a season. Because those rules rarely worked, additional measures were tried to limit the intensity of fishing efforts and number of fishers in a given fishery, including limits on investment in fishing efforts, buyback schemes, and boat and license limits. Despite good intentions, those measures routinely failed to ensure fishery sustainability. License controls and other **entry restrictions**, for example, **limit** the number of **fishers, but** they do **not** control the **intensity of fishing** efforts. **Limits on** the **total** catch **and per-trip catch**, even when combined with limits on the number of boats, **did not prevent overfishing of the Gulf** of Mexico **reef fish fishery**. Restrictions on the types of equipment that may be used encourage fishers to increase their investment in additional vessels or gear to compensate for the efficiency losses. **Severely shortened fishing seasons encourage fishers to increase their effort dramatically during the season**, leading to absurd results. The U.S. North Pacific Halibut Fishery is illustrative. The length of the fishing season was progressively shortened from 65 days in 1980 to only two in 1991. Similarly, the Alaska crab fishery was eventually restricted to seasons as short as three days. **Fishermen respond**ed **by increasing the number of boats so more fish could be caught in less time**. Not only is a three-day season very inefficient, it results in a lower quality and less valuable catch; the entire year’s halibut catch reaches the market in just a few days. The race to fish is not only bad for the fish, it is also bad for those fishing. The race to fish in the Bering Sea crab fishery became so intense that hundreds of boats would line up for each season’s opening day and crews would fish furiously, around the clock, until the fishery closed—usually only a week to 10 days later. In a typical year, at least one boat and five crabbers would not make it back. It was for this reason that the Discovery Channel used the Bering Sea crab fishery as the setting for its popular reality show, The Deadliest Catch. But what made for good television made for horrible resource management.

Best studies prove. ITQs are key to market efficiency and the environment.

**Adler and Stewart 14** write[[7]](#footnote-7)

In 1973, Francis Christy proposed what would become a groundbreaking solution to such concerns. **Christy proposed allocating rights to portions of a** given **fishery or** to a **seasonal catch—**a quota that would eventually become known as **an Individual Transferable Quota** (ITQ). An ITQ is a right to an assigned percentage or proportion of the total allowed annual catch in a given fishery. For example, the owner of a 5 percent quota would have the right to catch 5 tons in a season if the total allowable catch (TAC) were 100 tons, but would be able to catch 10 tons if the TAC were 200 tons. Under the typical ITQ regime, a government agency sets the TAC for a given season, based on an assessment of the sustainability of the fishery by biologists. The agency then allocates shares of the catch—the quota—to individuals, boats, or firms as a transferable right. In most such systems, shares or quota are initially allocated based on some sort of formula such as the average volume caught over a set of prior years, or an auction. The rights then continue from year to year without change. Because ITQ rights continue, ownership of a catch share provides the fisher with an incentive to ensure the fishery’s sustainability over time. In 1976, Holland and Iceland, two prominent fishing countries, introduced individual quotas in the North Sea flatfish fishery and the domestic herring fishery, respectively. New Zealand introduced a catch-share program in 1986. Since then, rights-based management programs have been implemented in varying degrees in countries around the world, including Australia, Canada, Chile, Iceland, Namibia, the Netherlands, Norway, South Africa, and the United States. But so-called **catch-share systems still account for** only **a fraction of global fisheries**. According to a 2010 survey, catch-share systems govern only 2 percent of fish stocks around the world, but account for approximately 25 percent of the volume of fish caught annually worldwide. Catch Shares in Practice Since the implementation of the first ITQ programs in the mid- 1970s, hundreds of such programs have been adopted in over 20 countries. Evaluations of those ITQ programs provide significant evidence that catch-share and rights-based management systems have a positive effect on fisheries. Economic consequences of catch shares /The essential components of an ITQ program are the imposition of a limit on the TAC over a given time period and the allocation of rights to harvest a certain portion of the catch. **If** those **shares are transferable** among fishery participants**,** quota **shares will be reallocated to the most efficient** fishery participants, thereby reducing the overcapitalization of the fishery. **If** quota **shares are perpetual,** the **market value** of quota shares **will represent** the **expected present value of the fishery. As a consequence, ITQs will** tend to **maximize** the **economic value** of the fishery. Empirical assessments have confirmed the economic benefits of adopting ITQ programs. **A** 2012 **study by** Dietmar **Grimm et al. examining** the performance of **15 catch-share programs** in the United States and British Columbia **found that catch shares improve efficiency** within the fishery. Whereas the race to fish tends to shorten the fishing season, the rights-based security created by the catch-share regimes allowed fishers to extend their fishing seasons on average from 63 to 245 days of the year. And the adoption of **catch share**s **enables fishers to match** their **capital investment to their share of the catch**. The adoption of catch shares in the United States increased revenues for fishery participants. **Under catch-share** management**, revenues per vessel almost doubled. More efficient** fishing **methods, longer** fishing **seasons** (which slow the frenetic race to fish and reduce fishing in hazardous and costly conditions), **and lower discard rates** in catch-share fisheries **help raise total revenues**. Slower, more deliberate fishing produces higher yields, increases processing product recovery, and improves the quality (and value) of the catch. Catch shares and conservation / Whereas the economic benefits of catch-share reforms are widely accepted, the ecological benefits of catch shares are more contentious. In 2008, Christopher **Costello**, Steven D. Gaines, and John Lynham (CGL) **compared 121 fisheries that installed ITQs** between 1950 and 2003 **to those that did not**. Before 1980, there was no difference in the collapse rates (collapse defined as a harvest less than 10 percent of the maximum recorded harvest) between ITQ and traditionally managed fisheries. After 1980, non-ITQ fisheries continued their rate of collapse while the **collapse rate for ITQ fisheries was lower**. In a 2010 follow-up paper, Costello and co-authors acknowledged that “[p]roving rigorously that catch share management causes a reduction in fisheries collapse rates” is challenging, if not impossible. Isolating the effect of implementing ITQ programs is complicated by several competing effects: ■■ the growing number of ITQ fisheries and the fact that “new ITQ fisheries are drawn from a global pool with an ever increasing fraction of collapsed fisheries,” ■■ a potentially biased selection of fisheries converted to ITQ management, and ■■ potential “temporal benefits of an ITQ.” The authors adopted a number of strategies to account for those complications. Their results did not change. The “picture that emerges from the results … is fairly clear: ITQ fisheries are less likely to collapse than non-ITQ fisheries, and **the magnitude of this effect increases the longer a fishery is managed by an ITQ**.” Skeptics of the CGL 2008 results questioned whether the study was actually measuring the beneficial effects of adopting TAC limits rather than the effect of ITQ systems. University of Wisconsin economist Daniel Bromley, for example, charged CGL’s conclusions were “comprehensively spurious because they failed to make the essential distinction between the effects of total allowable catch (TAC) as opposed to the effects of [catch shares].” In their 2010 paper, Costello et al., acknowledged that “the benefit of switching to an ITQ is stronger when no TAC was in place prior to the ITQ,” but they also noted that there was “a strong and statistically significant benefit to switching to an ITQ system regardless of whether there was an existing TAC in place.” In other words, **property-based reforms remain important**. Fishery participants have a greater incentive to maintain TAC compliance and facilitate TAC enforcement once they are guaranteed a right to a share of the catch. The adoption of catch-share reforms also encourages fishers to support lower and more sustainable TAC limits. **Under traditional regulatory management,** fishery **participants have no incentive to push for** more **precaution**ary catch limits **because they are not guaranteed** the **benefits of** such **stewardship**. With perpetual catch shares, on the other hand, fishery participants have an economic incentive to support the setting and enforcement of TAC limits that will ensure the fishery’s sustainability. **A survey by** Trevor **Branch of over 200 peer-reviewed papers** on the environmental effects of ITQ programs found that participants in catch-share fisheries often request lower TACs and **ITQ programs tend to reduce** the rate of **TAC violations**. ITQ systems seem to have an easier time enforcing fishing limits because ITQs require less at-sea monitoring than traditional regulations “because closed areas and seasons, banned gear types, and vessel restrictions are no longer required,” and ITQs tend to reduce “the number of participants, thus allowing more intensive monitoring of landings and discards and increasing the probability of detecting illegal fishing.” Over time, the success of catch-share management has allowed some fisheries to increase their total catch limits. In the fisheries studied by Grimm et al., “TACs increase an average of 13 percent five years after catch shares implementation, and 19 percent ten years after catch share implementation.” In addition to the beneficial effects of catch-share systems on TAC, catch-share systems also lowered “discard” rates. One common objection to catch shares has been the incentive to practice “high-grading” or discarding less desirable, cheaper grades of fish before landing in order to avoid having those less profitable fish count toward a fleet’s share of the catch. Significantly, Grimm et al. found little evidence of high-grading under catch shares. In fact, the discards-to-retained-catch average in the studied fisheries actually fell 31 percent over five years and 66 percent over 10 years, with almost all the fisheries reporting a lower discard rate under catch shares than under traditional management.

Quotas have multiple economic benefits and can address compensation of groups who don’t benefit.

**Adler and Stewart 14** write[[8]](#footnote-8)

**Grimm et al.,** for instance, **found** evidence that transitioning from a traditional management system to catch shares affects landing patterns, and therefore fish processors. “Under race for fish conditions that result in short annual seasons, the processing industry (along with fisheries) can become overcapitalized to handle the glut of fish in short periods.” But **catch-share** management **programs tend to lengthen and stabilize fishing seasons,** allowing for more efficient processing capacity. Such stabilization produces significant benefits for fishery participants and local communities by **providing a more stable and predictable source of income**. Whereas derby fisheries have too many boats chasing too few fish, in ITQ fisheries the fishing effort is rationalized because there is no advantage to putting extra boats in the water or racing to fish. Transitions to catch-share systems often require shifts in the fishery labor market. For instance, the **longer fishing seasons may cause a shift from** seasonal, **part-time** jobs **to full-time employment. Such changes often** will **result in** more stable positions with **better working conditions, higher job quality, and higher pay**. While some fishers may lose under ITQs, neither allowing fish stocks to collapse nor maintaining derby-style fishery rules benefits local fishing communities. **If some** identifiable **groups lose** from property-based reforms**,** such **concerns can be addressed directly through buy-out programs or other compensation measures. Allocating quota shares** to fishery incumbents **ensures that existing** fishery **participants are compensated should they** sell their quotas and **leave the fishery. If traditional fishery controls are used** to restrict fishing**, there is no** such **guarantee**. More importantly, concerns about the distributional effects of ITQs should not be an excuse for leaving unsustainable fishery management regimes in place. Given the extent of overcapitalization and wasted effort in most fisheries under traditional management, it should be possible to compensate potential losers from the gains generated by reform. Indeed, **adopting catch shares tends to enhance gov**ernment **revenue by increasing** the **profitability of** fishing **vessels, generating more tax revenue, and reducing net management costs**. Additionally, catch shares have affected some port communities by reducing the pressure for fishermen to land at the nearest port, and modestly consolidating ports.

Quotas reduce deaths among fishery participants.

**Adler and Stewart 14** write[[9]](#footnote-9)

Catch-share programs could reduce some of the economic consequences of and political opposition to implementing conservation zones because there would be less pressure to fish in the most geographically convenient locations. Some catch-share skeptics are concerned about the effect of reforms on fishing boat crews, rather than the owners. The adoption of **catch-share programs** and the elimination of the race to fish appear to **result in substantial safety improvements** for fishery participants. **Mortality in** the Alaskan **Bering Sea Crab fishery has decreased from five-plus deaths per year to only one death in five years**. In other words, the “deadliest catch” became much less deadly. While fishery participants are often skeptical about the adoption of catch-share policies, they often report satisfaction with such reforms after they are adopted. In sum, the **available evidence confirms that property-based management** regimes **can be just as good for fishery participants as** they are **for the fish**—and are much preferable to leaving fisheries on the path to collapse. The Importance of Property Rights Security Catch-share systems alter the incentives faced by fishery participants because they give fishers a stake in the fishery itself. The more secure a catch share or other fishing right, the greater its market value. According to the University of Iceland’s Ragnar Arnason, in New Zealand, “ITQs are viewed as perpetual rights to fish” and an owner may use the quota “as collateral in establishing credit with banks.” Changes in the rights cannot occur without compensation to their owners.

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Private property rights are key to fish conservation – solves better than regulation. **Adler 1** writes[[10]](#footnote-10)

America has a proud conservation tradition demonstrating that **private** owners serving as land and **resource managers**, whether individuals, corporations, or environmental groups, **are superior to political entities**. Rather than expanding government ownership and regulation of threatened ecological resources, policy makers should seek creative ways of expanding property-based institutions into the ecological realm. As noted above, the creation of property interests empowers owners to act as stewards of environmental resources and facilitates conservation efforts in the private sector. Whereas public or politically managed lands often suffer, “private owners have the ability to protect their lands from over use [sic].” The security of property rights encourages owners to pursue the enhancement of their own subjective value preferences, including both commerical and non-commercial values. Property rights enable timber companies to protect their investment in planting trees or enhancing forest growth, but they also protect the investments made by conservation groups in ecological protection and restoration. “Private ownership includes not only hunting preserves, commercial bird breeders, parrot jungles, and safari parks, it also includes wildlife sanctuaries, Audubon Society refuges, World Wildlife Fund preserves, and a multitude of private, non-profit conservation and preservation projects.” These organizations raise money by soliciting contributions to acquire ownership in preferred lands. Whereas political conservation often generates a zero-sum game in which only the most popular initiatives receive funding, private property empowers forward-l0oking conservationists to pursue unpopular ecological causes. At the turn of the last century, groups such as the National Audubon Society were able to use private property to protect threatened species habitat at a time when there was no political support for government action. Similarly, at a time when governments and private organizations encouraged the slaughter of raptors, one woman, Ms. Rosalie Edge, was able to purchase Hawk Mountain to protect birds of prey from extirpation. While unpopular at the time, Ms. Edge’s purchase created one of the most important raptor research sites in the world. In a similar fashion, a handful of individuals saved the bison from extinction on the western plains at a time when the federal government was subsidizing its slaughter. Were it not for these efforts, it is unlikely that there would be any buffalo in Yellowstone National Park today. Property rights need not be individuated to serve environmental goals. Collective entities, from conservation groups to condominium associations, play an important role in conservation. Additionally, the recognition of conservation easements already empowers conservation groups to purchase development rights from a given parcel of land and protect the present ecological values. There is no single property arrangement that is appropriate for every resource, but this does not mean that the institution of property ownership can be disregarded in conservation efforts. Time and again, **the greatest conservation successes occur when** environmental **resources are rescued from the tragedy of the commons through** the creation of **property rights**. **In British Columbia**, for example, the **halibut fishery was saved** from ruin **by** the introduction of **private fishing rights. This change** not only **led to sustainable catch levels but also increased** the quality of the fish caught and the **profitability** of local fishing operations. The **creation of private property rights advanced conservation where regulation failed**. Iceland and New Zealand experienced similar success with the implementation of a property-regime known as individual transferable quotas. In a similar fashion, allowing the commercial utilization and quasi-ownership of elephants in Zimbabwe has led to larger herds and the devotion of greater acreage to wildlife habitat. This not only benefits elephants, but also other, less-marketable species which require similar habitat.

Private property rights for fish are key to market efficiency. **Arnason 99** writes[[11]](#footnote-11)

A well known problem with the market system is externalities. **The market** system **is only efficient if there are no externalities** (Debreau, 1959). What is less well known is the close causal relationship between externalities and property rights. Basically, we may assert that **lack of property rights causes externalities**. How does this work? **If property rights are missing, people may simply take what they want**, at least to the extent this is allowed by social custom. If the resource is scarce, this causes an external effect. The act of **"taking"** simply **leaves less of the resource to others.** They are in other words adversely affect by the "taking". An externality (a negative one) is created. **With property rights in place "taking" is not permissible**. Consequently, with property rights, there can be no externalities. **With property rights** in place **the method of obtaining is buying**. If the resource is scarce the purchase price will be positive. This means that the previous owner will be compensated for handing the property right over. The **externality created by "taking"** (as opposed to buying) **is** in the economic jargon generally referred to as **a technical externality** (Bator, 1958). This is the type that causes economic inefficiencies. Property rights do not actually remove external effects. The resource is still scarce and someone’s use of it will reduce the quantity available to all others. What **property rights** do is to **turn a technical externality into a pecuniary externality which is economically harmless**. A pecuniary externality is harmless **because through** the act of **trading,** the **interests of both parties**, the buyer and the seller, **are taken into account** in the appropriate way. Only if the buyer values the resource more highly than the seller will the trade take place. This, of course, is in accordance with the common good. **All economies are infested with technical externalities. The only difference is** the **pervasiveness** of the externality problem, Generally speaking natural resource based economies are more affected than others. The traditional way to correct for externalities is to impose prices, so called Pigouvian corrective prices (Pigou, 1912) on the externality-causing activity. An economy where all externalities have been corrected for in this way is called a Lindahl equilibrium (Dasgupta and Heal, 1979). Lindahl equilibrium is a theoretical construct, not really feasible in reality, at least no more than it is possible to calculate centrally all relevant shadow prices for the economy. What is possible, however, is to define the appropriate set of property rights and let the market take care of the prices. Thus, given the appropriate property rights, a full Lindahl equilibrium will be approximated by the market system. This, of course, has been the arrangement for a good part of the scarce resources in modern day market economies. For the others technical externalities still remain. 4.2 The fisheries problem, externalities and property rights The fisheries problem, as is well known, manifests itself as excessive fishing capital and fishing effort, reduced fish stocks and dissipation of economic rents to the point where the fishery is economically hardly worth pursuing. Given the intrinsic productivity and richness of many ocean fisheries, this outcome must be regarded as a serious economic failure. **The fisheries problem is caused by externalities**. Fish stocks are limited. Consequently one fisherman's catch reduces the harvesting opportunities of all other fishermen. This is a typical technical externality. As all other externalities, it arises because of a lack of the appropriate property rights. In this case there is inadequate property rights in the fish stocks from which the harvest is taken. **It follows immediately, that the fisheries problem would disappear, if** only the appropriate **property rights could** be defined, imposed and **enforced**. This, however, is precisely the problem. It turns out that there are substantial technical and social problems to defining, imposing and enforcing sufficiently good property rights in many fisheries, especially off-shore ocean fisheries. For this reason, fisheries managers have often been forced to resort to resort to rather weak and indirect property rights such as access licences and harvesting quotas. In some cases, however, these indirect (or pseudo) property rights can solve a good part of the fisheries problem.

## Poaching

Private property rights solve poaching. **Anderson and Huggins 3** writes[[12]](#footnote-12)

Improvement of the environment with income growth is not automatic but depends on policies and institutions. Economic growth creates the conditions for environmental improvement by raising the demand for improved environmental quality and makes the resources available for supplying it. Whether environmental quality improvements materialize or not, when, and how, depend critically on government policies, social institutions, and the completeness and functioning of markets. Institutions that promote democratic governments are a prerequisite for sustainable development and enhanced environmental quality. Where democracy dwells, constituencies for environmental protection can afford to exist-without people fearing arrest or prosecution. The democratization of thirty-plus countries in the last twenty-five years has dramatically improved the prospects for environmental protection (Desta 1999). In the other direction, dictatorships and warlords burden people and environments in many regions of the world such as China and much of Africa. Zimbabwean president Robert **Mugabe**, for example, has clearly **indicated** that he has **no intention of respecting property rights** or the rule of law. His "terror teens" have brutally killed innocent people, and **his "land reform"** plan **demands that** more than **20 million** of the 23.5 million **acres** under private ownership **be surrendered without compensation. Mugabe's assault on private property has** also **taken a toll on wildlife, for without landowners, there is no one to protect them from poachers. Before Mugabe's attack on private property,** Zimbabwe had previously shown the world how to balance economic development with conservation through private and communal ownership. The CAMPFIRE program, for example, championed by the World Wide Fund for Nature, allowed local communities to manage wildlife. Hence **wildlife became an asset as villagers** in communal areas **profited from hunting and photo safaris. Elephant populations mushroomed and poaching plummeted.** But Mugabe has duped the poor people of Zimbabwe into thinking that land redistribution without compensation or due process is the key to economic prosperity. In fact, **sustainable development will come only from stable property rights**. **Unless** the **sanctity of private property can be reestablished in Zimbabwe, its** people and its **wildlife will** continue to **suffer.** Environmental degradation does not stem from the actions of the first world but rather from jumbled bureaucratic systems-often the result of well-meaning but misguided intervention. In particular, lack of well-defined and adequately enforceable property rights restricts economic development and stifles entrepreneurial activity in many countries. The Peruvian economist Hernando de Soto (2000) estimates that people in the third world and in ex-communist countries hold more than $9 trillion in what he calls "dead capital"-property that is owned informally, but not legally, and is thus incapable of forming the basis of robust economic development. He advocates the formal recognition of property rights in these countries as an indispensable prerequisite for liberal democracy.

### Ivory

Botswana proves. Private property rights solve better than a government ban on the ivory trade. **Pennington 5** writes[[13]](#footnote-13)

In this framework, free-market environmentalism has made a strong case for much greater use of private-property rights and “imperfect” market processes as an alternative to the regulatory state. Authors such as Terry Anderson and Donald Leal (2001) have documented numerous examples of environmental goods that can be and are supplied successfully in private markets, and **empirical researchers examining state-centered** models of **environmental management have highlighted numerous cases of government failure.** For land-based environmental assets such as forests and minerals, for example, evidence suggests that private-property solutions are highly successful in generating the necessary incentives that encourage resource conservation and help to overcome the problems of “free riding” associated with open-access conditions (De Alessi 2003). Thus, the record of forest management in Sweden under a predominantly private regime has been noticeably more impressive than the record of forest management under government ownership in the United States, Canada, and Great Britain. Similarly, the **private ownership of wildlife in** countries such as **Botswana has had** markedly **more success in protecting stocks than government**-sponsored **trade bans on ivory products** that have been put in place over much of Africa (Sugg and Kreuter 1994).

# Net Benefits

## Environment NB

Empirics prove. Private property rights solve the environment. **Bailey 2k** writes[[14]](#footnote-14)

Most environmental problems occur in what are called "open-access commons"--that is, any member of the public may use the resource without paying anyone else for it. Typically, open-access commons still exist as relics of a time when the resource was abundant relative to the number of people using it. If only you and a couple of neighbors lived along a river, you could all dump your sewage in the river because it would naturally purify itself. The same goes for forests--homesteaders could chop them down because there were millions of acres more to be had. **With open-access commons, if you don't use the resource for your** own **benefit, other people will** and you'll simply lose out. The prototypical example of an open-access commons is the old-fashioned village sheep meadow. Because everyone in the village has the right to put sheep on the meadow, each villager has an incentive to put extra sheep on the meadow in order to enrich himself. However, if every villager chooses to add sheep, then the meadow will be destroyed by overgrazing and all villagers will suffer the consequences. In a related way, people dump sewage into rivers or pump smoke into the air because no one "owns" a river or the air in a traditional sense. We might say that the public "owns" rivers and airsheds, but none of us individually has much of an incentive (or an ability) to stop others from emitting excessive pollutants. Such **open-access commons are at the center of most** instances of **environmental problems** today, **from** the **deforestation** of tropical rainforests **to** the potential **loss of biodiversity to** the **depletion of** open-sea **fisheries**. There are two basic ways to address the environmental problems caused by open-access commons. The favored way has been traditional, **top-down** political **regulation**, in which an agency prescribes specific pollution-control technology and monitors output. Depending on the situation, this method can score some quick improvements--the shift from leaded to unleaded gasoline had a huge impact on air quality, for instance. But **i**t'**s** more **typically slow, costly, and subject to** the endless wrangling of **interest groups seeking** special **exemptions** and protections. What's more, **because it enforces a single standard, it discourages** the **innovation** and experimentation **that** often **lead to** new, **more environmentally sound ways of doing things**. For example, the Clean Air Act effectively mandated that electric utilities use smokestack scrubbers to reduce their sulfur dioxide emissions when other alternatives, such as a switch to burning cleaner coal, would have reduced emissions even further and more cheaply, too. The other approach to open-access commons harnesses both the creativity of markets and the power of privatization. An overall level of acceptable pollution is set, a market is created through tradeable permits, and then firms are allowed to pursue various means to reach the goal. We find fast, cheap, and efficient environmental improvements where this approach has been tried. In the U.S., for instance, sulfur dioxide emissions have been cut much faster and at less cost since the creation of a (very imperfect) market for such emissions (see "Selling Air Pollution," May 1996). **Fisheries in New Zealand and Iceland have** dramatically **rebounded since they were** essentially **privatized**. And one of the chief reasons that **forests are expanding in the U.S. and Europe** is **because landowners have secure property rights** to them. Such gains are not mysterious: **If you own a resource, you're** far **more likely to use it efficiently**. Perversely, many environmental activists still fault markets for not properly valuing "natural capital" or "ecosystem services" and they continue to call for placing more resources in public hands. In effect, they want more open-access commons. But **if no one has to pay for** the **use of a resource,** then **they consider it** to be **free**. The way to take environmental goods into account is exactly the way we take all other goods into account--we put them into the market where people have to pay for what they use**.**

(:21)

Expanding property rights to include ecosystems solves environmental harm.

**Adler 1** writes[[15]](#footnote-15)

America has a proud conservation tradition demonstrating that **private** owners serving as land and **resource managers**, whether individuals, corporations, or environmental groups, **are superior to political entities. Rather than expanding government** ownership and **regulation of** threatened ecological **resources, policy makers should** seek creative ways of **expand**ing **property-based institutions** into the ecological realm. As noted above, the creation of property interests empowers owners to act as stewards of environmental resources and facilitates conservation efforts in the private sector. Whereas public or politically managed lands often suffer, “private owners have the ability to protect their lands from over use [sic].” The security of property rights encourages owners to pursue the enhancement of their own subjective value preferences, including both commerical and non-commercial values. Property rights enable timber companies to protect their investment in planting trees or enhancing forest growth, but they also protect the investments made by conservation groups in ecological protection and restoration. “**Private ownership includes** not only hunting preserves, commercial bird breeders, parrot jungles, and safari parks, it also includes wildlife sanctuaries, Audubon Society refuges, World Wildlife Fund preserves, and **a multitude of** private, non-profit **conservation** and preservation **projects**.” These organizations raise money by soliciting contributions to acquire ownership in preferred lands. **Whereas political conservation** often **generates a zero-sum game in which only** the most **popular initiatives receive funding, private property empowers** forward-l0oking **conservationists to pursue unpopular ecological causes**. At the turn of the last century, **groups such as** the National **Audubon** Society **were able to use private property to protect threatened species** habitat **at a time when there was no political support** for government action. Similarly, at a time when governments and private organizations encouraged the slaughter of raptors, one woman, Ms. Rosalie Edge, was able to purchase Hawk Mountain to protect birds of prey from extirpation. While unpopular at the time, Ms. Edge’s purchase created one of the most important raptor research sites in the world. In a similar fashion, a handful of individuals saved the bison from extinction on the western plains at a time when the federal government was subsidizing its slaughter. Were it not for these efforts, it is unlikely that there would be any buffalo in Yellowstone National Park today. Property rights need not be individuated to serve environmental goals. Collective entities, from conservation groups to condominium associations, play an important role in conservation. Additionally, the recognition of conservation easements already empowers conservation groups to purchase development rights from a given parcel of land and protect the present ecological values. There is no single property arrangement that is appropriate for every resource, but this does not mean that the institution of property ownership can be disregarded in conservation efforts. Time and again, the greatest conservation successes occur when environmental resources are rescued from the tragedy of the commons through the creation of property rights. **In British Columbia**, for example, the **halibut fishery was saved** from ruin **by** the introduction of **private fishing rights. This change** not only **led to sustainable catch levels but also increased** the quality of the fish caught and the **profitability** of local fishing operations. The creation of private property rights advanced conservation where regulation failed. Iceland and New Zealand experienced similar success with the implementation of a property-regime known as individual transferable quotas. In a similar fashion, allowing the commercial utilization and **quasi-ownership of elephants in Zimbabwe has led to larger herds and** the devotion of **greater acreage to** wildlife **habitat**. This not only benefits elephants, but also other, less-marketable species which require similar habitat.

(:18)

Empirics confirm. Government regulation exacerbates environmental harm.

**Adler 5** writes[[16]](#footnote-16)

Political opposition and grass-roots discontent were not the only consequences of extensive environmental land-use regulation. Over time, it also became clear that at least some environmental measures were not producing environmental gains sufficient to justify the burdens they placed upon landowners. Particularly in the case of the Endangered Species Act, conservationists began to observe that the regulations squeezing landowners were creating substantial economic incentives against the conservation of endangered species.164 **If costly** environmental **regulation is the consequence of owning land that** serves as habitat for endangered species or **performs a**nother **vital ecological function, landowners are less likely to** maintain their lands in such condition, and they are even less likely to **make environmental improvements**. In economic terms, such **stewardship** actions **will entail costs to the landowner with no reasonable** expectation of **future benefits**. Sam Hamilton, former Fish and Wildlife Service administrator for the state of Texas explained this more fully: “The incentives are wrong here. If I have a rare metal on my property, its value goes up. But if a rare bird occupies the land, its value disappears.”165 In other words, **by ignoring** the **economic incentives** created by restricting private property rights, **regulations designed to help endangered species were causing environmental harm**. Insofar as private landowners are threatened with the potential loss of the productive use of their land without compensation by environmental statutes, they will have an incentive not to provide whatever environmental amenity that the federal government is seeking to protect. Economists were the first to suggest that land-use regulation could have unintended consequences.166 Their theoretical predictions were quickly confirmed on the ground.167 For example, Ben Cone was the owner of over 7,000 acres of timberland in North Carolina.168 For years Cone sought to attract wildlife to his land. Through selective logging, long rotation cycles, and understory management, Cone created habitat for many species, including wild turkey, quail, black bear, and deer. Cone’s good land stewardship also provided habitat for the endangered redcockaded woodpecker. In response, the federal government placed over 1,000 acres of his land off limits to logging. The value of his land plummeted by over 95 percent – or some $2 million. This taught Cone a lesson: He should no longer manage his land in a way that attracts red-cockaded woodpeckers if he wants to be able to use it.169 Rather than allow trees to mature for at least 75 to 80 years before cutting them, as Cone used to, he began cutting them earlier, as red-cockaded woodpeckers prefer older stands. He also began to clear other parts of his property to ensure more woodpeckers would not arrive.170 Ben Cone is not the only landowner to respond to the incentives created by regulatory takings in this manner. In California’s Central Valley, farmers plowed fallow fields to destroy potential habitat and prevent the growth of vegetation that could attract endangered species.171 In the Pacific northwest, land-use restrictions imposed to protect the northern spotted owl scared private landowners enough that they “accelerated harvest rotations in an effort to avoid the regrowth of habitat that is usable by owls,” according to the Fish & Wildlife Service.172 In the Texas Hill Country, landowners razed hundreds of acres of juniper tree stands to prevent their occupation by golden-cheeked warblers after the bird was listed as endangered.173 Bob Stallman of the Texas Farm Bureau testified in 1995 that so long as the existing regulatory strictures remain in place, his members “are not going to want to work actively and openly to promote to propagate a species as long as there is that threat of future government intervention and regulation of the use of that land.”174 Operation Stronghold founder Dayton Hyde attests from personal experience that, even for those who wish to engage in habitat conservation on their own land, “It’s just plain easier and a lot safer to sterilize the land.”175 Even endangered plants have been victim to such “scorched earth” policies, though they are not subject to the same level of regulatory protection. When the Fish & Wildlife Service proposed listing the San Diego Mesa Mint as endangered, land containing the plant was bulldozed before the listing could take effect.176 Evidence of the ESA’s perverse incentives is no longer confined to such anecdotal accounts.177 More recent **empirical research confirms that** federal **land-use controls discourage conservation** on private land. Professors **Lueck and Michael report that forest owners respond to** the likelihood of **ESA regulation by harvesting timber and reducing the age at which timber is harvested**.178 Such preemptive habitat destruction could well “cause a long-run reduction in the habitat and population” of endangered species.179 In some instances, it is likely that the economic incentives created by the Act result in the *net loss* of species habitat. That is, in some cases the ESA may be responsible for more habitat loss than habitat protection.180 **A study in *Conservation Biology***further **reports that** just as many **landowners responded to** the **listing of Preble's meadow jumping mouse by destroying potential habitat** as undertook new conservation efforts.181 It also found a majority of landowners would not allow biologists on their land to assess mouse populations out of fear that land-use restrictions would follow the discovery of a mouse on their land.182

Property rights solve the environment better than regulations due to economic incentive. **Stroup and Shaw 92** writes[[17]](#footnote-17)

When backed by effective liability laws, private property rights tend to work well. **Because well-tended property increases its value, private owners generally take care not to despoil their land**. This safeguard works even when owners care only for themselves, not for their heirs. For **at the** very **first signs of poor stewardship**--the first indications of land erosion, for instance--appraisers and **potential buyers can project** the **results into the future, and** the **value of the property declines immediately.** With an effective liability system, these pressures can also keep corporations from despoiling land or property that they do not own. Although disputes occur, the obligations of those who harm others' property are so widely accepted that many people do not even have to go to court when their cars are damaged: insurance companies generally handle such cases routinely. Unfortunately, environmental damage is often not as recognizable as a dented fender. Common law requires plaintiffs to prove damages and identify the responsible parties, and though the standard of proof is not as high as in criminal cases, it remains substantial. In order to sue you successfully for polluting my lungs, I must show that I suffered the damage for which I am demanding compensation. And I must prove that the cause of the damage was your air pollution. Without reliable information, owners cannot adequately defend their property rights in court. Air could have been contaminated by many different sources, for example, or the health effects could be hard to measure. Thus the nature of emissions can make liability laws unenforceable, particularly in the case of air pollution. The difficulty of obtaining satisfaction in court was, in fact, an important factor creating pressure for government intervention to control pollution. But government intervention does not eliminate the need for accurate information. Problems with government control **Like private individuals, the government has trouble knowing the source and effect of pollutants**. Unfortunately, it has therefore tended to adopt standards that do not demand solid evidence connecting emissions with harm. **Under today's regime,** the **mere suspicion of harm**, combined with educated guesses as to the source of pollution, are driving policies that have enormous costs. Los Angeles, for example, is about to impose measures to require reformulation of products such as deodorants and paints and conversion of cars so that they run on methanol rather than gasoline. **Not only does the government lack** the necessary **info**rmation for controlling pollution, **but politicians often have little incentive to obtain the info**rmation. Politicians find it easier and more popular with most constituencies simply to adopt a stance of outrage against polluters. In fact, generating outrage is an effective way to generate votes. The passage of Superfund boosted the careers of a number of congressmen, even though it resulted from misinformation about Love Canal and the incorrect implication that every town had a potential disaster in its backyard. The political pressures that dominate government also work against taking the long view. Government officials are legally barred from personally capturing any value that they help create; correspondingly, **they pay no financial penalty for property that deteriorates. By contrast, a private owner of land will see its value change immediately after a major investment, because** the **value reflects future benefits and costs** stemming from his action. Since no such "capitalized value" exists in the government setting, government officials are more interested in maximizing political power than economic value.

Empirics prove. Property rights are key to the environment and increased life expectancy. **Anderson and Shaw 2k** write[[18]](#footnote-18)

**There is** now **international evidence that** the **protection of private property rights is** closely **linked to environmental quality**. Seth **Norton** (1998, 37–54), **a professor of economics** at Wheaton College, **found** measures of the extent to which countries have property rights protection and then looked at how this protection correlated with measures of environmental quality. **In nations where property rights are** well **protected,** roughly **93 percent of the population has access to safe drinking water**, compared with only about 60 percent of the population in countries with weak property rights. In countries that protect property rights, 93 percent of the population **also** has access to **sewage treatment**. But in countries that don’t, the figure is only 48 percent. Norton found a similar correlation with life expectancy. He found that **life expectancy is seventy years in countries with strong protection of property rights** but only fifty years where property rights are only weakly protected. **Even** people in **poor nations**—and the poorest people in those nations—**enjoy** a **higher quality of life if property rights are** well **protected. Norton correlated the** 1997 **Human Poverty Index** (HPI), issued by the United Nations Human Development Report, **with property rights** protection. This index measures the well-being of the poorest people in the poorest countries. He found that in countries where property rights are protected, 95 percent of the poor population live to the age of forty, but in countries with weak protection of property rights, only 74 percent (fewer than three-quarters!) of the poor people live that long.

### Biodiversity Version

Property rights turn biodiversity loss. **Adler 5** writes[[19]](#footnote-19)

Economists were the first to suggest that land-use regulation could have unintended consequences. Their theoretical predictions were quickly confirmed on the ground.167 For example, Ben Cone was the owner of over 7,000 acres of timberland in North Carolina.168 For years Cone sought to attract wildlife to his land. Through selective logging, long rotation cycles, and understory management, Cone created habitat for many species, including wild turkey, quail, black bear, and deer. Cone’s good land stewardship also provided habitat for the endangered redcockaded woodpecker. In response, the federal government placed over 1,000 acres of his land off limits to logging. The value of his land plummeted by over 95 percent – or some $2 million. This taught Cone a lesson: He should no longer manage his land in a way that attracts red-cockaded woodpeckers if he wants to be able to use it.169 Rather than allow trees to mature for at least 75 to 80 years before cutting them, as Cone used to, he began cutting them earlier, as red-cockaded woodpeckers prefer older stands. He also began to clear other parts of his property to ensure more woodpeckers would not arrive.170 Ben Cone is not the only landowner to respond to the incentives created by regulatory takings in this manner. **In California’s Central Valley, farmers plowed** fallow **fields to destroy potential habitat and** prevent the growth of **vegetation that could attract endangered species**.171 In the Pacific northwest, land-use restrictions imposed to protect the northern spotted owl scared private landowners enough that they “accelerated harvest rotations in an effort to avoid the regrowth of habitat that is usable by owls,” according to the Fish & Wildlife Service.172 In the Texas Hill Country, landowners razed hundreds of acres of juniper tree stands to prevent their occupation by golden-cheeked warblers after the bird was listed as endangered.173 Bob Stallman of the Texas Farm Bureau testified in 1995 that so long as the existing regulatory strictures remain in place, his members “are not going to want to work actively and openly to promote to propagate a species as long as there is that threat of future government intervention and regulation of the use of that land.”174 Operation Stronghold founder Dayton Hyde attests from personal experience that, **even for those who wish to engage in habitat conservation** on their own land**, “It’s** just plain **easier and** a lot **safer to sterilize the land.”**175 **Even endangered plants have been victim to** such **“scorched earth” policies**, though they are not subject to the same level of regulatory protection. When the Fish & Wildlife Service proposed listing the San Diego Mesa Mint as endangered, land containing the plant was bulldozed before the listing could take effect.176 Evidence of the ESA’s perverse incentives is no longer confined to such anecdotal accounts.177 More recent **empirical research confirms that federal land-use controls discourage conservation on private land**. Professors **Lueck and Michael report that forest owners respond to** the likelihood of **ESA regulation by harvesting timber** and reducing the age at which timber is harvested.178 Such preemptive habitat destruction could well “cause a long-run reduction in the habitat and population” of endangered species.179 In some instances, it is likely that the **economic incentives created by the Act result in** the **net loss of species habitat**. That is, in some cases the ESA may be responsible for more habitat loss than habitat protection.180 A study in Conservation Biology further reports that just as many landowners responded to the listing of Preble's meadow jumping mouse by destroying potential habitat as undertook new conservation efforts.181 It also found a majority of landowners would not allow biologists on their land to assess mouse populations out of fear that land-use restrictions would follow the discovery of a mouse on their land.182 Insofar as ESA regulation discourages private land conservation it is undermining species conservation efforts. **The majority of endangered and threatened species depend on private land for some portion of their habitat**,183 so by discouraging private land conservation, the ESA could well have a devastating impact on species conservation efforts. Indeed, these “perverse incentives” may help explain the poor environmental performance of the ESA. Enacted in 1973 to save species from the brink of extinction, the ESA has hardly been a success. In over thirty years, fewer than forty of over 1,000 species have been delisted as endangered or threatened.184 In this time more species have been delisted either because they went extinct or because they never should have been listed as endangered in the first place than have been legitimately “recovered” due to the Act.185 While some species populations appear to have improved under the ESA, there is also a widespread recognition that wildlife species are doing worst on private land. IV. RECONCILING PROPERTY AND REGULATION The unintended consequences of land-use control slowly prompted a reevaluation of the role that private ownership has to play in environmental conservation, particularly in the context of the species conservation. Over 75 percent of those species currently listed under the ESA rely upon private land for some or all of their habitat, according to the General Accounting Office.186 Because of this, “**[n]o strategy to preserve** the nation’s overall **biodiversity can** hope to **succeed without** the **willing participation of private landowners**,” observes Conservation Fund president John Turner.187 As ecologist David Wilcove observed, the “greatest challenge facing the Endangered Species Act” is how to make private landowners “become more willing participants in the national effort to save endangered species.”188 Without private cooperation, environmental conservation efforts will be futile.189

## Econ NB

(:21)

Empirics confirm. Environmental policy which expands property rights is uniquely key to growth.

**Benjamin 1** writes[[20]](#footnote-20)

Many nations, including the United States, base their legal systems on the English common law tradition. Under this tradition, the judiciary acts as a check on both the executive and the legislative branches, limiting their ability to alter property and contract rights. **Free market environmentalists view** this feature of the **common law as essential to** the creation of **sound environmental policy**. Three decades ago, Friedrich Hayek argued that there is an even broader salutary effect of the common law. According to Hayek, the English common law system reflects a conscious decision in favor of a limited role for government; the French civil law system is much more comfortable with a centralized and activist government. For Hayek, this was enough to favor the English tradition. But if we combine his reasoning on this issue with his earlier work on the use of knowledge in society (Hayek 1945), a clear implication is that the economies of common law nations should be more adaptable to change. One result will be higher levels of economic growth in common law nations. Recent research confirms this inference: After controlling for other important factors, Paul Mahoney (2001) shows that economic growth in common law nations is at least one-third faster than in civil law countries, and that this difference is directly attributable to the forces emphasized by Hayek. Common law systems, as found in England and her former colonies, depend heavily on the judiciary to develop law in opinions that build upon historical precedent. In contrast, civil law systems, as found in France and her former colonies, depend on the legislature, often working closely with the executive, to write the law in statutes. The judiciary’s role is largely limited to ensuring that the will of the government is enforced. Thus, common law nations have a far greater degree of judicial independence, while civil law countries have a lower level of scrutiny of executive actions. These differences between the two systems are deeply rooted in their historical development. The landed aristocrats in England wanted a system that would provide them with strong protections for property rights and would limit the Crown’s ability to interfere in their lives. In the English common law history, judges were seen as heroes who protected the citizenry from state intrusion, as well as independent policy makers occupying a high-status office. In the French civil law tradition, judges were viewed as obstacles in the path of the executive and its closely aligned legislature. At best, judges were (and remain) relatively low-status civil servants without independent authority to create legal rules. The differences between these systems imply that power is much more fragmented in common law nations. This fragmentation of power constrains the ability of government agents to grant preferential treatment to special interests, because it is more difficult to coordinate the actions of multiple government actors. In effect, **the strong judiciary in common law nations limits the ability of the executive and** the **legislative branches to alter property** and contract **rights**. The creation of **a system of secure**, enforceable **property rights is** generally **regarded by economists as one of the most important** institutional **prerequisites to** economic **growth**. The recent spread of **command-and-control environmental legislation**, such as the Endangered Species Act, has **diminished** the influence of the **common law**. Still, the relatively high regard for property rights in traditional common law nations should be reflected in higher economic growth for this group. **In examining** this issue **empirically** across **102 nonsocialist nations, Mahoney finds** that there is a **strong positive association between common law** status **and higher** rates of real **per capita** GDP growth. Moreover, he traces the sources of this higher growth to certain key institutional differences. For example, **using accepted criteria** developed **by other scholars**, Mahoney finds that the quality of the judiciary (as measured by its integrity and efficiency) is markedly higher in common law nations. **Similarly, he presents evidence that there is greater security of property and contract rights in common law nations.** Mahoney is then able to show that these specific attributes of common law nations have been translated into better economic performance. In particular, over the study period from 1960 to 1992, he shows that, **even after controlling for other** key growth-determining **factors, such as** initial **education** levels, economic **growth in common law countries has been one-third faster** than in civil law nations. Over the 30-plus years covered by his study, the result was that in common law nations, the **standard of living**–measured by real per capita income–**jumped more than 20 percent compared to civil law nations**. If such a pattern persisted over the span of a century, real per capita income would rise a staggering 80 percent in common law versus civil law nations.

(:15)

Environmental regulation kills growth which turns the environment.

**Adler 1** writes[[21]](#footnote-21)

[Brackets in original.] **Economic progress is** absolutely **essential to environmental progress**. Environmental protection is a good, and like all goods it must be purchased. A healthy economy is necessary to finance environmental improvements. While many environmental activists perceive a conflict between economic growth and environmental progress, the opposite is true. Sewage treatment facilities and other environmental **improvements are not free**. Moreover, **a significant body of literature has found** a **correlation between economic improvements and** several measures of **environmental quality**. Not only are wealthy communities healthier than poor communities, but they also tend on average to be more concerned about upholding environmental values as well. Wealthier societies have both the means and the desire to address a wider array of environmental concerns. Economic **growth fuels tech**nological advance and generates the resources necessary **to** deploy new methods of **meet**ing **human needs efficiently** and effectively**. Thus, wealthier societies** tend to **provide for human needs in a more environmentally sound manner**. “Countries undergo an environmental transition as they become wealthier and reach a point at which they start getting cleaner.” This occurs first with particularly acute environmental concerns, such as access to safe drinking water and sanitation services. As affluence increases, so does the attention paid to conventional pollution concerns such as fecal coliform bacteria and urban air quality. In much the same way that wealthier societies become cleaner, “wealthier is healthier.” In other words, **as income increases, mortality and morbidity decline**. Conversely, “when national income falls, there is often a significant increase in mortality and a decline in health status. Expenditures on regulatory compliance are rarely wealth enhancing, and therefore increasing regulatory costs can reduce gains in public health. As Justice Stephen Breyer observed, “[a]t all times regulation imposes costs that mean less real income available to individuals for alternative expenditure[, which] itself has adverse health effects. Wealthier societies are not only cleaner and healthier; they are also more willing and able to devote resources to environmental concerns. Public support for environmental measures, both public and private, correlates with changes in personal income. In economic jargon, “[w]illingness to pay for environmental measures…is highly elastic with respect to income.” Thus, it should be no surprise that **donors to environmental groups tend to have above average** annual **incomes.** Members of the Sierra Club, for example, have an average household income more than double the US average. In the aggregate, **environmental regulation** can work against continuing environmental progress by diverting tens of billions of dollars, if not more, away from wealth-creating activity. Insofar as regulation **reduces** economic **growth by diverting investment and** human **energies** away **from productivity, it will retard environmental progress**. While **this** is true in the US, it **is especially true in the poorest** of **nations**. Therefore, environmental policy makers must always be conscious of the costs of environmental measures, as increased compliance costs can come at the expense of environmental improvement.

### Econ Impacts

#### Solvency Prereq

(:09)

Solving growth is a prereq to aff solvency. **EcoVitality 99** writes[[22]](#footnote-22)

**Neither environmental law nor** environmental **education has been able to counter** the overwhelming **priority placed on** economic **development in virtually all poor countries.  Neither environmental law nor** environmental **education can succeed when people lack viable economic alternatives---poor people will not let their families starve to save trees or tigers**, no matter how much they appreciate nature--**and most people in developing nations want more than minimal subsistence**.  Environmental law and education rely mainly on the impact of words, words that are often no more than idealized exhortations, but conservation-oriented words have seldom been compelling enough to produce meaningful conservation actions in the developing countries.

#### Extinction

(:08)

Economic crisis causes nuclear war. **Royal 10**[[23]](#footnote-23)

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defense behavior of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level, Pollins (2008) advances **Modelski and Thompson**’s (1996) work on leadership cycle theory, **find**ing **that** rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous **shocks** such as economic crises could **usher in a redistribution of** relative **power** (see also Gilpin, 1981) that leads to uncertainty about power balances, **increasing** the risk of **miscalculation** (Fearon 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflicts as **a rising power may** seek to **challenge a declining power** (Werner, 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remains unknown. Second, on a dyadic level, Copeland’s (1996, 2000) theory of trade expectations suggest that “future expectation of trade” is a significant variable in understanding economic conditions and security behavior of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, **if** the **expectations of future trade decline**, particularly for difficult to replace item such as energy resources, the likelihood for **conflict increases**, as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states. Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write, The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favor. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg and Hess, 2002, p. 89) Economic **decline has also been linked with** an increase in the likelihood of **terrorism** (Blomberg, Hess and Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. “Diversionary theory” suggests that, when facing unpopularity arising from economic decline, sitting **governments have** increased **incentive**s **to fabricate** external military **conflict**s **to create a “rally around the flag” effect**. Wang (1996), DeRouen (1995) and Blomberg, Hess and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states due to the fact the democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. De DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States and thus weak Presidential popularity are statically linked to an increase in the use of force. In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels. This implied connection between integration, crises and armed conflict has not featured prominently in economic-security debate and deserves more attention. This observation is not contradictory to other perspectives that link economic interdependence with a decrease in the likelihood of external conflict, such as those mentioned in the first paragraph of this chapter. Those studies tend to focus on dyadic interdependence instead of global interdependence and do not specifically consider the occurrence of and conditions created by economic crises. As such the view presented here should be considered ancillary to those views.

(:21)

Econ decline causes extinction. **Harris and Burrows 9** writes[[24]](#footnote-24)

Increased Potential for Global Conflict Of course, the report encompasses more than economics and indeed believes the future is likely to be the result of a number of intersecting and interlocking forces. With so many possible permutations of outcomes, each with ample Revisiting the Future opportunity for unintended consequences, there is a growing sense of insecurity. Even so, history may be more instructive than ever. While we continue to believe that the **Great Depression** is not likely to be repeated, the **lessons** to be drawn from that period **include** the **harmful effects on fledgling democracies** and multiethnic societies (think Central Europe in 1920s and 1930s) **and** on **the sustainability of multilateral institutions** (think League of Nations in the same period). There is no reason to think that this would not be true in the twenty-first as much as in the twentieth century. For that reason, the ways in which the **potential for greater conflict could grow** would seem to be even more apt **in a** constantly **volatile economic environment** as they would be if change would be steadier. In surveying those risks, the report stressed the likelihood that terrorism and nonproliferation will remain priorities even as resource issues move up on the international agenda. Terrorism’s appeal will decline if economic growth continues in the Middle East and youth unemployment is reduced. For those terrorist groups that remain active in 2025, however, the diffusion of technologies and scientific knowledge will place some of the world’s most dangerous capabilities within their reach. **Terrorist groups** in 2025 **will** likely be a combination of descendants of long established groups\_inheriting organizational structures, command and control processes, and training procedures necessary to conduct sophisticated attacks\_and newly emergent collections of the angry and disenfranchised that **become** self**-radicalized,** particularly in the absence of economic outlets that would become narrower in an economic downturn. The most dangerous casualty of any economically-induced drawdown of U.S. military presence would almost certainly be the Middle East. Although Iran’s acquisition of nuclear weapons is not inevitable, **worries** about a nuclear-armed Iran could **lead states** in the region **to** develop new security arrangements with external powers, acquire additional weapons, and **consider pursuing** their own **nuclear ambitions**. It is not clear that the type of stable deterrent relationship that existed between the great powers for most of the Cold War would emerge naturally in the Middle East with a nuclear Iran. Episodes of low intensity **conflict** and terrorism taking place under a nuclear umbrella **could lead to** an unintended **escalation** and broader conflict if clear red lines between those states involved are not well established. The **close proximity of potential nuclear rivals** combined with underdeveloped surveillance capabilities and mobile dual-capable Iranian missile systems also **will produce inherent difficulties in** achieving reliable indications and **warning** of an impending nuclear attack. The lack of strategic depth in neighboring states like Israel, **short warning and missile flight times**, and uncertainty of Iranian intentions may **place** more **focus on preemption** rather than defense, potentially **leading to escalating crises**. 36 Types of **conflict** that the world continues to experience, such as **over resources, could reemerge,** particularly if **protectionism grows** and **there is a resort to neo-mercantilist practices. Perceptions** of renewed energy scarcity will drive countries to take actions to assure their future access to energy supplies. In the worst case, this **could result in interstate conflicts** if government leaders deem assured access to energy resources, for example, to be essential for maintaining domestic stability and the survival of their regime. Even actions short of war, however, will have important geopolitical implications. Maritime security concerns are providing a rationale for naval buildups and modernization efforts, such as China’s and India’s development of blue water naval capabilities. If the **fiscal stimulus focus** for these countries indeed turns inward, one of the most obvious **funding** targets **may be military. Buildup of regional** naval **capabilities could lead** to increased tensions, rivalries, and **counterbalancing** moves, but it also will create opportunities for multinational cooperation in protecting critical sea lanes. With water also becoming scarcer in Asia and the Middle East, **cooperation** to manage changing water resources **is likely to be increasingly difficult** both within and between states **in a more dog-eat-dog world.**

(:14)

Economic crisis risks conflict. Studies and historical precedent confirm.

**Royal 10** writes[[25]](#footnote-25)

There is. however, another trend at play. **Economic crises tend to fragment regimes and divide polities**. A decrease in cohesion at the political leadership level and at the electorate level reduces the ability of the State to coalesce a sufficiently strong political base required to undertake costly balancing measures such as economic costly signals. **Schweller** (2006) **builds on earlier studies** (see. e.g.. Christensen. I996; Snyder, 2000) **that link political fragmentation with decisions** not to balance against rising threats or to balance only in minimal and ineffective ways to demonstrate a tendency for states **to ‘underbalance’**. Where political and social cohesion is strong, states are more likely to balance against rising threats in effective and costly ways. However, **‘unstable and fragmented regimes** that rule over divided polities will be significantly constrained in their ability to adapt to systemic incentives; they **will be least likely to enact bold and costly policies even when their nation’s survival is at stake** and they are needed most` (Schweller. 2006, p. l30). Papayoanou (1997) observes this tendency in British. French and American behaviour towards Germany in the l930s. **The Great Depression led states to become inward-looking**, prioritising domestic economic interests above external national security threats. The inherent weakness in the disparate political outlooks that coincided with the **economic crisis hindered their ability to balance effectively against Germany**. Indeed. in the case of Great Britain. Papayoanou indicates that even though the political elite wanted to break Britain`s strong economic ties with Germany for fear of 'sleeping with the enemy” a weak political base and relatively stronger interests in domestic economic growth bound the hands of the British government. Great Britain thus elected not to undertake economic costly signals despite the presence of a clear and growing threat. Papayoanou (I997, pp. ll4-I l5) concludes that when "˜status quo powers have strong economic links with threatening powers, weaker balancing postures and conciliatory policies by status quo powers, and aggression by aspiring revisionist powers, are more likely`. Underbalancing (in this case. by not sending economic costly signals) during economic crises is consistent with a growing body of literature on the influence of domestic "˜veto players` on the decision to use force. Veto players are those vested interests within an electorate or selectorate that have the authority to resist change in status quo policies. The tendency to under- balance is disproportionately strong in states with large numbers of veto players, a situation more prevalent in democracies than autocracies. Where relatively higher numbers o fveto players exist within a polity, the opportunity to change status quo economic and trade policies. for example. through costly signaling. decreases (Tsebelis. 2002; Manslieldr Milner. & Pevehousc, 2008; St. Marie. Hansen. & Tuman. 2006; Maclntyre. 200l; Walsh. 2007). ln summary. I hypothesize that the occurrence of an economic crisis increases the cost associated with ECST and thus decreases the willingness of states to send economic costly signals. Although the fact that increased costs should make the signal more effective. scholarship on underbalancing theory and veto player theory provide rationale for why economic crises may inhibit the use of economic costly signals, even in the face of at direct threat. CONCLUSION The logic of ECST supports arguments for greater economic interdepen- dence to reduce the likelihood of conflict. This chapter does not argue against the utility of signaling theory. It does, however, suggest that when ECST logic is dubious as an organizing principle for security policymakers. The discussion pulls together some distinct areas of research that have not yet featured prominently in the ECST literature. Studies associating economic interdependence, economic crises and the potential for external conflict indicate that global **interdependence is not necessarily** a **conflict- suppressing** process **and may be conflict-enhancing** at certain points. Furthermore, the conditions created by economic crises decrease the willingness of states to send economic costly signals. even though such signals may be most effective during an economic crisis.

#### Pollution

Growth solves air and water pollution.

**Bailey 2k** writes[[26]](#footnote-26)

Why has air quality improved so dramatically? Part of the answer lies in emissions targets set by federal, state, and local governments. But these need to be understood in the twin contexts of rising wealth and economic efficiency. As a Department of Interior analyst concluded after surveying emissions in 1999, "**Cleaner air is a direct consequence of better tech**nologies **and** the enormous and sustained **investments that only a rich nation could have sunk into developing**, installing, and operating these technologies." Today, American businesses, consumers, and government agencies spend about $40 billion annually on air pollution controls. It is now evident that **countries undergo** various **environmental transitions as they become wealthier**. Fortune's special "ecology" edition in February 1970 was far more prescient than the doomsters when it noted, "If pollution is the brother of affluence, concern about pollution is affluence's child." In 1992, a **World Bank** analysis **found that** concentrations of **particulates and sulfur dioxide peak at per capita incomes of $3,280 and $3,670**, respectively. **Once these** income **thresholds are crossed, societies start to purchase** increased environmental amenities such as **clean air and water. In the U.S., air quality has been improving rapidly** since before the first Earth Day--and before the federal Clean Air Act of 1970. In fact, ambient levels of particulates and sulfur dioxide have been declining ever since accurate records have been kept. Between 1960 and 1970, for instance, particulates declined by 25 percent; sulfur dioxide decreased by 35 percent between 1962 and 1970. More concretely, it takes 20 new cars to produce the same emissions that one car produced in the 1960s. **Similar trends can be found when it comes to water pollution**. The warning sign is gone from the Potomac and I can swim and fish in that river again. Lake Erie once again supports a $600 million fishing industry, and an upscale shopping and entertainment district now lines the Cuyahoga River in Cleveland. The EPA estimates that between 60 percent and 70 percent of lakes, rivers, and streams meet state quality goals. That's up from about 30 percent to 40 percent 30 years ago. **Since** 19**72, the U**nited **S**tates **has invested more than $540 billion in water pollution control** efforts, according to the Pacific Research Center. In 1972, only 85 million Americans were served by sewage treatment plants. Since then, some 14,000 municipal waste treatment plants have been built and 173 million Americans are served by them. **Similar** air and water quality **trends can be found in other developed countries** as well.

#### Poverty

Private property rights are key to growth in developing countries, solves poverty. **Anderson and Huggins 3** writes[[27]](#footnote-27)

The institution of **private property has had more influence than any other policy** in the history of the world **when it comes to enabling people to escape from poverty**. As Tom Bethell (1998, 11) puts it in his book, The Noblest Triumph: Property and Prosperity though the Ages, "**Prosperity and property are intimately connected. Exchange is the basic market activity, and when goods are not individually owned, they cannot easily be exchanged**." Because of poorly defined institutions and often corrupt bureaucratic systems, a large proportion of the world's population is prevented from fully realizing the value of existing property or being able to acquire secure property rights. Hernado de Soto (2000) explained in his recent book, The Mystery of Capital, that **the primary problem is that property claims in developing countries**, while acknowledged within their communities, **often go unrecognized by the government. As a result,** these **informal owners lack access to** the **social and economic benefits** provided by secure property rights.

(:20)

Property rights are a prerequisite to growth. The impact is poverty.

**Arnason 99** writes[[28]](#footnote-28)

We have established that the keys to production and economic growth are: (1) Accumulation of capital (2) Specialization We will now argue that property rights, especially private property rights, are a fundamental prerequisite for this to occur. **Accumulation of capital** obviously **requires property rights**. Obviously, **no one is going to save** valuables in the form of physical capital, **natural resources** or even human capital **unless he enjoys** adequate **property rights** over his accumulation. **There are two reasons** for this. **First, accumulation** of capital necessarily **means sacrifice of current consumption.** Hence, **to do so one must be reasonably sure of not only retaining possession of** the **accumulated assets but also gaining** from their existence. Without property rights, this of course is not possible. **Second,** even if some people decided to accumulate nevertheless, this accumulation would be seized by others and, in order to avoid a similar fate, quickly consumed. So **without property rights** there will be (i) no accumulation and (ii) what **capital** there might exist **will be quickly seized and squandered.** Specialization requires trade. If there is no trade, people, if they specialize in a single production process, will not be not be able to obtain the various goods they desire. Hence, in a situation of no trade, people will be forced to be self-sufficient, i.e. to produce all their needs themselves. This, of course, is the typical situation in very primitive societies. Obviously, under these circumstances, firms, which are based on the idea of selling specialized products, couldn't exist. So, it seems that **the modern day** economic **structure of specialized production** and production units**, i.e. firms**, with the accompanying economic benefits **is** fundamentally **based on** the possibility to **trade**. Trade, in turn, requires property rights. This, of course, is obvious. After all, **trade is nothing but a transfer of property rights**. So, without property rights there can be no trade. Hence, we must conclude that without property rights, there can be very little economic specialization. It may be illuminating to wonder about the possible extent of specialization without property rights? We have already established that without property rights there can be no trade. Without property rights, therefore, the only way to reap the benefits of specialization is by the division of labour by command or custom within a larger economic unit. This economic unit which, of course, has some parallels with the modern firm, would be some sort of a community. It could for instance be village, tribe or even a kingdom. Alternatively, it could be a command economy for instance along the lines of 20th Century socialist economies (although, it may be recalled, these were typically to a considerable extent based on private property rights). Note, however, that for this type of organization to work, the community as a whole would have to be able to uphold its property rights against outsiders. So, in fact, this solution depends on some property rights. Note also, that to sustain this system, almost inevitably some coercion is required. This certainly implies certain rights by the enforcer which are very close to property rights. Finally, note that this arrangement is probably not economically very efficient if only for the reason that it tends to stifle private initiative and invention. So, basically, we have established the fundamental conclusion that **property rights are necessary for** a high supply of goods and, indeed, what is generally regarded as **economic progress** in general. The importance of this conclusion can hardly be overemphasized. Without property rights, there can be neither trade nor accumulation of capital. Without trade there can be very little specialization. Without specialization and accumulation of capital, there can be very little production. So, **without property rights,** human **society seems doomed to abject poverty**. In fact, it appears that with little or no property rights, human society would be very primitive indeed, not much different from the more advanced versions of modern day animal societies. Having established that property rights are necessary for economic progress, an interesting question is whether they are also sufficient. More to the point, does the existence of well defined and enforced private property rights inevitably lead to economic progress, i.e. increased supply of desirable goods? The general answer to this question appears to be a qualified "yes". The qualification is for practical reasons. The actual outcome of any property rights system depends not only on the structure and extent of the property rights themselves but also on the operation of certain other social institutions most notably the market system and the property rights enforcement system, i.e. policing and the judicial system. For instance, conceivably, the market system might be dominated by monopolies and the property rights enforcement system riddled with corruption, in which case production would suffer. What seems to be true, however, is that if the system of property rights is complete, i.e. **every valuable is subject to private property rights, and if the system is perfectly enforced,** then **expansion of output** to the limit of the technically feasible **is** a **highly probable outcome**. 4. Property rights and the market system The market system is known to have certain very attractive economic properties (Debreau, 1959, Varian, 1992). Among other things, if the system is perfect, it will generate full economic efficiency and optimal economic growth. The interesting thing is that **this happens without** any **centralized direction**. As Adam Smith (1776) said, it is as if an invisible hand guided every action (privately motivated by self interest) toward the common good. The market system also exhibits certain fundamental ethical properties, at least as specified by social contract theories and utilitarianism. First, it maximizes the availability of desirables at every point of time. Secondly, as discussed in section 1, by the judicious initial allocation of resources, the market system can sustain any socio-politically preferred distribution of desirables. I will now argue that the existence of property rights is fundamental to the operation of the market system. More precisely, it is both necessary and sufficient for the operation of the market system. The heart of the market system is trades in the market place. Clearly, such trades presuppose property rights over the commodities that are traded. Hence, property rights are necessary for the operation of the market system. If a system of property rights is put in place, the opportunity for individuals to benefit from production specialization and trading will arise. Therefore assuming only a small degree of individual enterprise, trading will commence and the market system is on its way. The reverse, however, is not true. The existence of markets does not lead to the creation of property rights. The causal relationship is from property rights to markets and trades not vice versa. So, the property rights system is really more fundamental than markets. Assuming only that people look after their interests, markets will automatically arise if there are property rights. Moreover, the market cannot exist without property rights but the existence of property rights does not depend on the market. In this sense, property rights are more fundamental than the market. In his path-breaking treatise on the wealth of nations, Adam Smith extolled the ability of the market system to coordinate the immense complexity of individual economic decisions and activities without causing huge problems of shortages and oversupply and to direct all these diverse actions and desires toward the common good. Since the market system really owes its existence of private property rights, this praise is appropriately assigned to the system of property rights. The great social coordinator is really the institution of property rights, not the market or market forces! Consequently, our current economic system is perhaps more appropriately referred to as the property rights system or the private property rights system rather than the market system.

Poverty causes structural violence which causes and outweighs extinction.

**Gilligan 96** writes[[29]](#footnote-29)

The **14 to 18 million deaths a year caused by structural violence compare with about 100,000 deaths per year from armed conflict. Comparing this frequency of deaths from structural violence to** the frequency of those caused by major military and political violence, such as World War II (an estimated 49 million military and civilian deaths, including those by genocide-or about eight million per year, 1939-1945), the Indonesian massacre of 1965-66 (perhaps 575,000) deaths), the Vietnam war (possibly two million, 1954-1973), and **even a hypothetical nuclear exchange between the U.S. and the U.S.S.R** . (232 million), it was clear that **even war cannot begin to compare with structural violence**, which continues year after year. In other words, every fifteen years, on the average, as many people die because of relative poverty as would be killed by the Nazi genocide of the Jews over a six-year period. **This is**, in effect. **the equivalent of an ongoing, unending**~ in fact **accelerating,** thermo**nuclear war**, or genocide, **perpetrated on the weak and poor every year of every decade, throughout the world. Structural violence is also the main cause of** behavioral violence on a socially and epidemiologically significant scale (from homicide and suicide to **war and genocide**). The question as to which of the two forms of violence-structural or behavioral-is more important, dangerous, or lethal is moot, for they are inextricably related to each other, as cause to effect.

#### Goklany 7 (Solves Everything)

Growth solves every impact, including the environment. **Goklany 7** writes[[30]](#footnote-30)

Environmentalists and globalization foes are united in their fear that greater population and consumption of energy, materials, and chemicals accompanying economic growth, technological change and free trade—the mainstays of globalization—degrade human and environmental well-being. Indeed, the 20th century saw the United States’ population multiply by four, income by seven, carbon dioxide emissions by nine, use of materials by 27, and use of chemicals by more than 100. Yet life expectancy increased from 47 years to 77 years. Onset of major disease such as cancer, heart, and respiratory disease has been postponed between eight and eleven years in the past century. Heart disease and cancer rates have been in rapid decline over the last two decades, and total cancer deaths have actually declined the last two years, despite increases in population. Among the very young, infant mortality has declined from 100 deaths per 1,000 births in 1913 to just seven per 1,000 today. These improvements haven’t been restricted to the United States. It’s a global phenomenon. **Worldwide, life expectancy has more than doubled**, from 31 years in 1900 to 67 years today. India’s and China’s infant mortalities exceeded 190 per 1,000 births in the early 1950s; today they are 62 and 26, respectively. In the developing world, the proportion of the population suffering from chronic hunger declined from 37 percent to 17 percent between 1970 and 2001 despite a 83 percent increase in population. Globally average annual incomes in real dollars have tripled since 1950. Consequently, the proportion of the planet's developing-world population living in absolute **poverty has halved** since 1981, from 40 percent to 20 percent. Child labor in low income countries declined from 30 percent to 18 percent between 1960 and 2003. Equally important, **the world is more literate and better educated** than ever. People are freer politically, economically, and socially to pursue their well-being as they see fit. **More people choose their own rulers, and have freedom of expression.** They are more likely to live under rule of law, and less likely to be arbitrarily deprived of life, limb, and property. Social and professional mobility have also never been greater. It’s easier than ever for people across the world to transcend the bonds of caste, place, gender, and other accidents of birth. People today work fewer hours and have more money and better health to enjoy their leisure time than their ancestors. Man’s environmental record is more complex. The early stages of development can indeed cause some environmental deterioration as societies pursue first-order problems affecting human well-being. These include hunger, malnutrition, illiteracy, and lack of education, basic public health services, safe water, sanitation, mobility, and ready sources of energy. Because greater wealth alleviates these problems while providing basic creature comforts, individuals and societies initially focus on economic development, often neglecting other aspects of environmental quality. **In time**, however, they recognize that environmental deterioration reduces their quality of life. Accordingly, **they put more** of their recently acquired **wealth** and human capital **into developing** and implementing **cleaner tech**nologies. This brings about an environmental transition via the twin forces of economic development and technological progress, which begin to provide solutions to environmental problems instead of creating those problems. All of which is why we today find that **the richest countries are also the cleanest**. And while many developing countries have yet to get past the “green ceiling,” they are nevertheless ahead of where today’s developed countries used to be when they were equally wealthy. The point of transition from "industrial period" to "environmental conscious" continues to fall. For example, the US introduced unleaded gasoline only after its GDP per capita exceeded $16,000. India and China did the same before they reached $3,000 per capita. **This** progress **is a testament to** the power of **globalization and** the **transfer of ideas and knowledge** (that lead is harmful, for example). It's also testament to the importance of trade in transferring technology from developed to developing countries—in this case, the technology needed to remove lead from gasoline. This hints at the answer to the question of why some parts of the world have been left behind while the rest of the world has thrived. Why have improvements in well-being stalled in areas such as Sub-Saharan Africa and the Arab world? The proximate cause of improvements in well-being is a “cycle of progress” composed of the mutually reinforcing forces of economic development and technological progress. But that cycle itself is propelled by a web of essential institutions, particularly property rights, free markets, and rule of law. Other important institutions would include science- and technology-based problem-solving founded on skepticism and experimentation; receptiveness to new technologies and ideas; and freer trade in goods, services—most importantly in knowledge and ideas. In short, **free and open societies prosper.** Isolation, intolerance, and hostility to the free exchange of knowledge, technology, people, and goods breed stagnation or regression.

#### Social Contract

(:12)

Growth turns the social contract.

**Arnason 99** writes[[31]](#footnote-31)

We may take it as axiomatic that **the social objective is to maximize** the common good or, in more modern parlance, **overall social welfare. This** fundamental **axiom** is not arbitrary. It **has deep roots in** social philosophy and ethics. It can for instance be justified on the basis of **social contract theories** in the tradition of Locke, Rousseau, Kant and, more recently, Rawls (see Gough, 1957 and Rawls, 1971). According to these theories the proper social structure is what free and rational people ignorant of their prospective position in society but knowing everything else would agree on. From behind this “veil of ignorance”, so to speak, these people, form a contract  a social contract, specifying the organization of the society in which they and their descendants will live. In a deep sense this social organization is fair and just because this is what free and rational individual with no particular special interests ("the veil of ignorance" serves to eliminate special interests) would agree on. What would be the content of this social contract? Obviously two things: • Society should be organized in such a way that the supply of desirables should be as high as possible. • The distribution of these desirables to individuals should be reasonably equitable. The first stipulation is almost self-evident. Clearly, it doesn't make any sense to reduce the net availability of desirables. The second stipulation warrants some discussion. Let us first consider risk. Obviously every individual would like to have as much for himself as possible. However, when forming the "social contract" from behind the "veil of ignorance" he doesn't know his future place in society. Therefore, depending on the individuals' risk attitudes, they may have preferences over the distribution of desirables. Thus, clearly, perfect risk aversion would call for perfectly equal distribution and vice versa. With risk neutrality, on the other hand, any distribution is as good as the other. Therefore, assuming some risk aversion by individuals, the "social contract" would certainly put a limit on the inequality of distribution. The second consideration concerning the distribution of desirables has to do with their availability. From behind the "veil of ignorance" the individuals forming the "social contract", realize of course that the availability of desirables at each point of time may depend on the distribution of these desirables. Thus, with perennial equal sharing, people's willingness to produce might perhaps be undermined. Hence, it might be a good idea to maintain a system of rewards to induce people to exert themselves for the common good. This, of course, calls for a degree of inequality  an unequal distribution of desirables. It is important to realize, however, that this inequality is earned, so to speak. It is actually a reward for a larger contribution to the common good, just like the payment for labour. Therefore, any requirement regarding the distribution of desirables would first and foremost apply to the initial allocation, which people cannot really control, and not the subsequent accumulation of wealth, which depends largely on individual industry and enterprise. Modern welfare theory, although built on a somewhat different foundation namely utility theory, produces the same result. According to standard results of this theory, more precisely the Pareto criterion (see Ng, 1980), a necessary condition for welfare maximization is that the net production of desirable things be maximized. It is important to realize that it is net production that counts here, i.e. production where the use of all inputs including labour and natural resources has been subtracted. The other necessary condition for welfare maximization is that this production be shared or distributed appropriately amongst the population. So, **in accordance with** both **social contract theory** and utility theory **a natural social objective is to**: • **maximize** the **availability of desirables,** • **effect a fair distribution of** these **desirables**. To make this objective operational we must, however, specify further what we mean by desirables. Basically, desirables are what people regard as valuable. This means that **desirables are anything that people are willing to put a price on** or, equivalently, require a compensation to depart with. Thus, in a perfect market system, where everything is traded, desirables are the same as goods or commodities. **So, in this system the social objective** of maximizing the availability of desirables **is equivalent to maximizing** the gross domestic product (**GDP**). The real world, of course, does not contain perfect market systems. All actual market systems are imperfect to a greater or lesser degree. Therefore, in these economies, the GDP can not be regarded as equivalent to the aggregate availability of desirables. Faced with this practically difficulty, it may nevertheless be reasonable to regard GDP as a first approximation to the availability of desirables, at least in reasonably well functioning market economies. Similarly, the **contribution of production sectors to the common good may be measured by** the **net production of goods in these sectors**. It is sometimes asserted that there is a conflict between the most desirable distribution of goods and their maximum production. Therefore, the argument typically goes, we must relax the requirement of maximum net production in the interest of equity or fairness. This argument, while certainly not vacuous, is often given too much weight. One of the most important results in economic welfare theory, the second welfare theorem (Debreu 1959), is that any distribution of benefits that is desired is compatible with maximum production and, indeed, the market system. So, there is no fundamental conflict between the two objectives. Consequently, even in particular cases, there can be little reason to sacrifice economic efficiency for more fair distribution of the net production. The reason is not that distribution doesn't matter. The reason is that distributional considerations can, at least in principle, be taken care of by the appropriate initial allocation of endowments. Thus, we are apparently on fairly solid ground when assuming that the social purpose of the production sector is to maximize the net production of goods. It follows that we would like to organize the production activity and the surrounding social institutions so as to facilitate this. For this purpose we invent, modify, develop and scrap social institutions in our search for the most effective ones given our current technological knowledge. Obviously the same applies to every individual production activity making up the production sector as a whole and therefore also the fisheries sector. This should clearly be organized and operated so as to maximize the net-production of goods. Anything else will reduce the overall availability of goods and therefore economic opportunities to society as a whole. This raises the question of the appropriate organizational framework for the fisheries activity. To this we now turn.

##### **Rawls Version**

(:19)

Growth turns the veil of ignorance. **Arnason 99** writes[[32]](#footnote-32)

We may take it as axiomatic that **the social objective is to maximize** the common good or, in more modern parlance, **overall social welfare. This** fundamental **axiom** is not arbitrary. It **has deep roots** in social philosophy and ethics. It can for instance be justified on the basis of social contract theories **in the tradition of** Locke, Rousseau, Kant and, more recently, **Rawls** (see Gough, 1957 and Rawls, 1971). According to these theories the proper social structure is what free and rational people ignorant of their prospective position in society but knowing everything else would agree on. **From behind this “veil of ignorance”**, so to speak, these **people**, **form** a contract  **a social contract**, specifying the organization of the society in which they and their descendants will live. In a deep sense this social organization is fair and just because this is what free and rational individual with no particular special interests ("the veil of ignorance" serves to eliminate special interests) would agree on. **What would be the content** of this social contract**?** Obviously two things: • Society should be organized in such a way that the supply of desirables should be as high as possible. • The distribution of these desirables to individuals should be reasonably equitable. The first stipulation is almost self-evident. Clearly, it doesn't make any sense to reduce the net availability of desirables. The second stipulation warrants some discussion. Let us first consider risk. Obviously every individual would like to have as much for himself as possible. However, when forming the "social contract" from behind the "veil of ignorance" he doesn't know his future place in society. Therefore, depending on the individuals' risk attitudes, they may have preferences over the distribution of desirables. Thus, clearly, perfect risk aversion would call for perfectly equal distribution and vice versa. With risk neutrality, on the other hand, any distribution is as good as the other. Therefore, assuming some risk aversion by individuals, the "social contract" would certainly put a limit on the inequality of distribution. The second consideration concerning the distribution of desirables has to do with their availability. **From behind the "veil** of ignorance**"** the **individuals** forming the "social contract", **realize** of course that the **availability of desirables** at each point of time **may depend on** the **distribution** of these desirables. Thus, with perennial equal sharing, people's willingness to produce might perhaps be undermined. **Hence, it might be a good idea to maintain** a system of **rewards to induce people to exert themselves for the common good**. This, of course, calls for a degree of inequality  an unequal distribution of desirables. It is important to realize, however, that this inequality is earned, so to speak. It is actually a reward for a larger contribution to the common good, just like the payment for labour. Therefore, any requirement regarding the distribution of desirables would first and foremost apply to the initial allocation, which people cannot really control, and not the subsequent accumulation of wealth, which depends largely on individual industry and enterprise. Modern welfare theory, although built on a somewhat different foundation namely utility theory, produces the same result. 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This raises the question of the appropriate organizational framework for the fisheries activity. To this we now turn.

## Scarcity NB

(:18)

Property rights solve resource scarcity better than government regulation.

**Adler 1** writes[[33]](#footnote-33)

Indeed, the record of the past century should conclusively demonstrate that **incorporating resources into** the marketplace through the creation and protection of **property rights is the surest means of** replacing shortages with ample supply, and **encouraging sustainable development**. As one looks around the world at which resources are protected and which are imperiled, a clear pattern emerges. Tropical **forests**, largely **owned by governments or left as unowned commons, are in decline; temperate forests,** predominantly in wealthy countries and **often privately owned, are** stable and **expanding. Fish stocks in** the **open oceans are declining, while** aquaculture booms and **fisheries with quasi-property rights** in New Zealand and elsewhere **maintain sustainable catches. Proven reserves** of copper, iron, bauxite, and oil, among many other resources, **have skyrocketed** over the past several decades. **Prices for** all these **minerals – the surest measure of scarcity – have** also **declined**. Indeed, **the** near-universal **trend for** natural **resources managed** primarily **through market institutions is** one of **less scarcity** and greater abundance. Much the same can be said of agriculture in nations where farmers own the land and reap the benefits of their own hard work and investment. From 1961 to 1994, per capita food production increased nearly twenty percent and per capita agriculture production increased nearly as much. The **environmental defense of the marketplace is not a defense of the status quo**. Despite the dramatic gains of the past several decades, vast room for improvement remains. Environmental protection is an important societal goal, but it will not be achieved if existing policies and institutional arrangements are left in place. **The ecological agenda** of the next several years **should focus on** the **creative extension of market institutions and** the **removal of government interventions** that distort market transactions and obstruct the development of private solutions to environmental concerns.

(:16)

Coase Theorem proves. Property rights solve resource conservation through economic efficiency. **Johnson 92** writes[[34]](#footnote-34)

The Coase Theorem posits that when third party contract enforcement is guaranteed and when transaction costs are zero, the contracts of commercial transactors will assign efficient values to the resources in question.51 The transactors will sell and purchase rights and resources in an effort to reach a mutually beneficial outcome. 52 In the bargaining process, one transactor offers a right which he owns, such as a property right, to the other party for some value greater than the first party could receive without the exchange. The second party will purchase that right only if the exchange also leaves her more wealthy, according to her definition of wealth. **In the environmental realm,** **transactors can exchange property rights for more valuable resources**. For example, upon realizing that his land is more valuable to a train company than to himself, a farmer will transfer his property rights to the company rather than continue to farm. **The Coase Theorem places no pre-set values on** environmental **resources**. A different farmer may demand a price greater than its value to the train company. In that case, no exchange will occur. Conceptually, the leap to private pollution control and natural resource conservation requires little additional effort. If the aforementioned train company desired the right to pollute the farmer's property, but not to own the property itself, the farmer would still demand a price greater than the property's current value as a farm. The two rational actors would decide among themselves whether polluting the farm was economically efficient. The same logic applies to natural resource conservation. **If market participants are required to compensate resource owners at** the **free market value** of those resources**, both parties become more wealthy**. For example, **if an environmental preservation group realizes that the public is willing to pay to visit a forest** currently **owned by a logging company, the group can purchase the forest**, mortgage it, **and pay the mortgage with revenue generated from** charging **admission** to the forest. Following the Coase Theorem, if the preservation value is greater than the logging value, then the environmental group will purchase the property, or perhaps only the use rights to the property, from the logging company. All parties involved benefit. **The logging company receives more money** than it could have produced otherwise, **and the environmental group preserves the forest.**

Private property rights solve resource scarcity. Clean tech is profitable.

**Anderson and Huggins 3** writes[[35]](#footnote-35)

Moreover, the institution of **private property offers** people an **incentive to develop new tech**nologies **because individuals know they will benefit from investments** they make in research and development. **Tremendous** energy and **resources are** being **applied today to** the **development of practical substitutes for fossil fuels** because the motivation exists to discover lower cost substitutes. For example, brokers are offering cash to farmers who are willing to plant a crop of wind turbines, and **farmers are discovering that investing in wind power can be more profitable than raising traditional crops**. Large companies are eager to harness the wind. **Shell Oil**, for example, recently **bought its first wind farm in Wyoming. Landowners are** also **eager to collect wind royalties**-especially those who can continue to farm with turbines on their property. As Pat Wood, President Bush's appointee to the Federal Energy Regulation Commission, observed, "We've got lots of wind and it's about time that people figured out a way to make some money off it" (Huggins 2001, 45). Julian Simon continually drove home the point that **human ingenuity is** perpetually **responding to impending scarcity** by developing alternative technologies that mitigate against that scarcity. The key to mitigating natural resource constraints is to switch on human ingenuity, which allows us to accomplish more with a given amount of resources. The fall of the Berlin Wall and Communism have made it clear that **turning on this ingenuity requires** getting the incentives right through the **appropriate institutions**. With property rights and the rule of law in place, economic growth and environmental improvements will follow (see Anderson 2003).

#### Future Gens

Private property rights are key to preserving resources for future generations. Banning resource depletion isn’t key. **Anderson and Huggins 3** writes[[36]](#footnote-36)

Sustainable institutions are those that do not prescribe an outcome for society, but allow individuals to improve their own well-being. Truly sustainable institutions provide the freedom for people to improve their world by innovating and developing. **The best way to ensure that resources remain for future generations is to directly tie** the **well-being of people today to those resources- via decentralization and property rights**. If individuals have the responsibility of caring for their welfare today, they are more likely to make decisions that will benefit their children, and their children's children (see Taylor 2003). **Modern data support the conclusion** that Adam Smith's blueprint works. The Fraser Institute's 2003 Index of Economic Freedom rates and ranks 123 nations based on thirty-eight variables to conclude that the more economically free a country, the greater the level of human development enjoyed by its citizens. The following bar chart helps illustrates the basic notion that economic freedom contributes to a faster growing and more efficient economy, which translates into better and longer lives. "Freeing people economically unleashes individual drive and initiative and puts a nation on the road to economic growth," says Milton Friedman, one of the original creators of the economic freedom index, "In turn, economic growth and independence from government restrictions promote civil and political liberty" (quoted in Gwartney, Lawson, and Emerick 2003). These findings are supported by other scholars. Seth **Norton**, for example, has **calculated the statistical relationship between** various **freedom indexes and environmental improvements**. His results show that **institutions-especially property rights** and the rule of law**-are key to** human well-being and **environmental quality**. Norton examined the role of economic institutions on human well-being by dividing a sampling of countries into groups with low, medium, and high economic freedom and the same categories for the rule of law. Table 1 contains the measures of human well-being for the various groups of countries. **In all cases except water pollution, countries with low economic freedom are worse off** than those in countries with moderate economic freedom, **while in all cases those in countries with high economic freedom were better off** than those in countries with medium economic freedom. A similar pattern is evident for the rule of law measures (see Norton 2003). Theodore Panayotou (1997, 465-84) tested five indicators of general institutional quality including: "respect/enforcement of contracts, efficiency of the bureaucracy, efficacy of the rule of law, extent of government corruption, and the risk of appropriation." He found that higher indexes for the institutional variable led to significant environmental quality improvements. In another study, Madhusudan **Bhattarai** (2000) **found that** civil and political liberties, the rule of law, the quality and corruption levels of government, and the security of **property rights were important in explaining deforestation rates in** sixty-six countries across **Latin America, Asia, and Africa. Without question,** institutions-especially **property rights** and the rule of law-**are key to environmental improvements** (see Anderson 2003). Policies for sustainable development that prescribe forgoing economic growth in the name of preserving future resources could stall or reverse a proven path of progress. The **temptation to impose new** layers of government **regulation** in order **to prevent humans from depleting resources** for future generations **must be pushed aside**. Consider the use of whale oil for energy in the nineteenth century. The whale population was unsustainable due to heavy hunting pressures. The near depletion of whales may have threatened the biological diversity of the planet but the **loss of whale oil as a resource did not hamper future generations from meeting** their **needs**. More plausibly, according to Steven Hayward (2002, 4), "the use of whale oil facilitated economic development-growing wealth, incomes, occupational specialization, and technological prowess-that put humankind in a position to adopt better, more efficient, more sustainable methods of production." The **demand for whale oil contributed to** the **development of petroleum and electricity, which were more efficient** than whale oil **and hence helped restore the whale population.**

### Hayek

The free market is key to effective social coordination – market prices simplify information and the mind is limited.

**Pennington 5** writes[[37]](#footnote-37)

The most immediate similarity between Hayekian liberalism and communitarian thinking is evident in the notion of “true” individualism. True individualism acknowledges that individuals are inherently social creatures (or situated selves, to use communitarian terminology), who acquire many of their preferences, values, and practices in a process of emulation and imitation. For Hayek, true individualism is distinct from the “false” individualism that conceives of society as the rational creation of individuals seeking to design optimal social institutions: “This fact should by itself be sufficient to refute the silliest of misunderstandings: the belief that individualism postulates (or bases its arguments on the assumption of) the existence of isolated or self-contained individuals, instead of starting from men whose whole nature and character is determined by their existence in society” (1948b, 6). To recognize that people are a product of their society is not, however, to imply that society is itself the result of deliberate human action. On the contrary, the social and cultural environment is in large part the unintended by-product of many individual acts, whose effects are beyond the purview of any one actor or group. For Hayek, **the defining feature of individuals** as social beings **is** their **incapacity, owing to** the **constitutional limits of the human mind, to comprehend more than a tiny portion of** the **society** of which they are a part. Individuals and organizations are situated within much larger “spontaneous ordering” processes, the results of which are far greater than and hence beyond the comprehension of their constituent parts. Language, for example, though developing out of the human capacity for communication, emerges as the unintended by-product of multiple communicative acts. As new words and combinations spread by a process of imitation and adaptation, their initiators are not consciously aware of how others will use and adapt such practices. Similarly, the users of language are typically unaware of the multiple individual nodes that have initiated the words and phrases in common usage and the “reasons” why such symbols have been adopted. In the latter sense, complex social wholes such as language are greater than the sum of their parts. Seen through this lens, communitarians, though right to emphasize the socially situated nature of the individual, err by suggesting that “community” advances by means of conscious deliberation. In a Hayekian perspective, the content of community is not something that can be articulated consciously, but is an emergent property of the interactions of many individuals and groups. This anti-intentionalist account of societal development does not reduce social explanation to one of mere accident, as critics of “invisible hand” theories often suggest. On the contrary, the central claim of Hayekian analysis is that **individuals**, in order to operate in a social world that is more complex than they can perceive directly, **must rely on spontaneous ordering processes** in order **to achieve effective social coordination**. If social wholes are indeed greater than the sum of their parts, then it follows that the constituent elements, even when acting as an organized group in institutions such as the state, can never comprehend all of the factors that contribute to the advance of the whole. In a Hayekian perspective, “community” involves the relations of shared identification, morals, and commitments associated with observance of spontaneously evolving cultural rules, including language and social mores such as respect for private-property rights. In accordance with communitarian accounts of ethics, therefore, morality transcends the individual actor and is not reduced to a matter of personal preference. Nonetheless, although individuals identify themselves through the social practices in which they are embedded, communitarians are wrong to suggest that individual actors are consciously involved in the pursuit of some communal end. When understood as a spontaneous order or catallaxy, the community cannot be considered to have ends of its own. To speak of a communal end would require that society operate as an instrumental organization, a sort of superperson that defines its citizens’ ends. The latter conception of social order, favored by communitarians, is, according to Hayek, appropriate only to a tribal society operating according to a narrowly defined set of goals. It is wholly inappropriate to an “open society” in which people have not only communal attachments to the cultural rules and practices that order their behavior, but also the liberty to experiment in the pursuit of a wider variety of different ends. The emphasis on spontaneous order and a nonintentionalist account of social coordination assume pride of place in Hayek’s economics, and particularly in his defense of market institutions and critique of socialist planning. For Hayek, **market processes perform two crucial functions** that cannot be replicated by deliberate social planning. First, **fluctuating** market **prices communicate** in coded form the **‘“circumstances of time and place” that affect dispersed individuals** and organizations and can never be comprehended in their entirety (Hayek 1948a, 1948c). Individuals and organizations make bids for resources on the basis of personal preferences and their own personal knowledge about the availability of substitutes, entrepreneurial innovations, and all manner of context-specific factors. As they do so, they contribute incrementally to the formation of prices that transmit their personal bit of information to the actors with whom they are making an exchange. The latter may then adapt their own behavior in light of their own preferences and knowledge, and their adaptations then inform subsequent transactions with still other agents, and so on in a network of everincreasing complexity. What is crucial is that in order **to change** their **production or consumption patterns in response to shifts in** the **scarcity** of goods**, actors need not know** anything **about** the **complex** chain of **events that contribute**s **to** a **rise or fall in prices**. This is not to suggest that prices communicate all the information necessary to make the appropriate economic adjustments. Market prices do not act as marching orders telling people how to respond to changing conditions. Rather, they operate as an invaluable prompt to economizing behavior. Producers and consumers’ specific responses in rearranging their production and consumption bundles will always be affected, however, by their own local knowledge and personal appraisement of the market situation in which they are embedded. A producer’s response to a rise in input prices, for example, will depend on the actor’s entrepreneurial ingenuity in imagining alternative combinations of inputs. The information provided by shifting relative prices, therefore, constitutes a necessary though by no means a sufficient condition for economic coordination. **What matters to Hayek’s critique of socialism is** the **impossibility for** a **government planning** mechanism **to achieve an equivalent level of coordination** owing to any organization’s or group’s cognitive inability to be consciously aware of the multitude components that form a complex economy. In addition to enabling people to adjust their behavior to changing patterns of relative scarcity, **the market** economy also **acts as a creative process in which** the content of **scarcity**—of “which goods are scarce goods”—**is** itself **discovered** and disseminated **by competitive emulation** (Hayek 1948c, 1978). On the supply side, each entrepreneurial act, such as the offering of a new product or mode of organization, actively creates new knowledge. The resultant profits (and losses) may then be spotted by other firms that imitate the behavior of the successful act and eschew the behavior of the unsuccessful act. On the demand side, meanwhile, consumers learn about new goods and prices in a snowballing process as individuals emulate their neighbors’ purchases and learn about new ways of living by perusing the competing goods displayed in catalogs or other advertisements. In a Hayekian perspective, **government planners can never perceive and respond to all** the different **production and consumption ideas dispersed in the minds of** the diversity of **decision makers who have the freedom to exchange property titles** in the market. Attempts to set prices by government fiat, therefore, are doomed to failure because **the “right” prices are unknowable in the absence of market competition** and the social division of knowledge on which this process draws (Hayek 1948a, 1948b, 1948c, 1978).

Private property rights are key to effective social coordination through market prices. This solves overexploitation of resources. **Pennington 5** writes[[38]](#footnote-38)

To take the analysis further, it is useful to compare Hayekian arguments for a property-rights approach to the problem of open-access environmental resources with those arguments associated with rational-choice versions of economic liberalism. According to the latter, **establishing private-property rights over resources** such as water or fish stocks **is crucial in** helping to change the incentives that self-interested actors face, in internalizing costs, and hence in **overcoming the free-rider problem** (see, for example, Baden and Stroup 1979). The Hayekian argument for property rights and markets, however, is by no means dependent on the assumption of individual self-interest and the significance of incentives. **Suppose that an individual is altruistically motivated** as a concerned citizen **to reduce** his **water consumption to a “socially responsible” amount. In the absence of property rights and market prices** for water**, the individual has no way to ascertain how much to adjust his consumption to take** the **interests of others** properly **into account**. As Steele points out, **even the most altruistically inclined person** faced with this situation **is likely to consume as much water as he personally requires because at least he knows what that amount is**, whereas the “socially responsible” amount of consumption is shrouded in a fog of ignorance (1992, 205). 4 Such problems will be multiplied many times over, of course, when the choice is between the vast array of production and consumption possibilities that make up an advanced economy and the complex environmental consequences of these possibilities. In short, **without** the **info**rmation **provided by market**-generated relative **prices, citizens will find it impossible to communicate their values to one another and** to **adjust** their **behavior accordingly.**

## Redistribution NB

Private property rights for resources are key to freedom, efficient regulation and equitable wealth distribution. **Stroup and Baden 79** write[[39]](#footnote-39)

**When resources are owned privately** and the property rights are freely transferable, **decisions** on resource uses **are decentralized**. Rationing of the scarce resource **and** coordination of individual plans are **accomplished through the market**. The owner of a copper mine receives market information on the value of alternative uses, as well as the incentive to supply the highest valued use, through bids for copper ore (or offers to buy the mine). A more complete treatment of markets in a resource setting, as compared with collective management can be found in Richard Stroup and John Baden, "Externality, Property Rights, and the Management of Our National Forest," The Journal of Law and Economics (1973). In this market setting, the owner is able to minimize the social cost of exploiting his resource simply by minimizing the total cost to himself. Bid and asked prices in the market convey both condensed information (shorn of all questions of "sincerity" or genuineness" of the "needs" of the parties competing to be recognized in the decision process) and the incentive to use this information. Owners thus have the information needed for efficient resource allocation, and the encouragement or incentive to serve others by operating efficiently. Consumers, who must pay for what they use, are also informed by prices as to the value others place on what many desire. SB.12 Included in the advantages of this management system (based on private property rights) are diversity, individual freedom, adaptiveness, the production of information, and a certain equity. Diversity is fostered under private property rights because there is no single, centralized decision maker but many asset owners and entrepreneurs, each of whom can exercise his own vision. Those who correctly anticipate people's desires are most rewarded. **Individual freedom is preserved** under the market**: those who wish to participate in** and support **such activities are free** and able **to do so since market prices provide immediate** information and **incentive for action** as soon as changes are seen. If only a few see scarcities or opportunities ahead, they can buy, sell, —or just provide expertise as a small group of consultants—and thus direct resource use without convincing 51 percent of the voters (or their bureaucracy) of the advantages of their preferences. In this case **profits will reward foresight and quick action**, while losses discipline those who divert resources foolishly. SB.13 **Information**, another advantage of property rights, **is produced as a byproduct of** bids offered and **prices** asked in the market, and is vital to the coordination of plans made in the economy by individuals.\*4 **Activities not marketed are proving** very **difficult to manage rationally for there is little** or no **concrete evidence on how people** really **evaluate**d **nonmarketed activities** relative to other resource-using activities. We know, for example, how much people are willing to sacrifice for a thousand board feet of lumber of a given species and grade, but how much would they pay for a day's access to a wilderness area? In the latter case of a nonmarket good we have only rough estimates. Even the best manager cannot make good resource management decisions without knowledge of the input and output values. SB.14 As a final advantage of management of resources through private property rights, **there is a measure of equity in having** those **people who use a resource** (or wish to reserve it for use) **pay for it by sacrificing some of their wealth**. The **proceeds from** the **sale of public assets could be distributed**, or invested and perpetually distributed **to the poor** or others. **For example, those using** the **forests would be required to pay a fee**, whether it be for recreation, timber harvest, or even research in a unique area. SB.15 The market, as we describe it here, is a marvelous mechanism. Its workings, however, crucially require that property rights to each resource (especially the right to exclude) be privately held and easily transferable. Only if these conditions are met can we be assured that a decision maker (the owner) with an appropriate stake in the resulting decisions (his estimate of what the resource is worth in his use or on the market) will have reason to devote the appropriate amount of attention (but not too much) to how the resource can be used in its highest value (including the potential value to others in their use). SB.16 If property rights to the resource are not fully defined and enforceable, those who put a relatively low value on its use may nevertheless use the resource without the need to compensate (or outbid) anyone else. Or, **should rights be controlled by a public** (or a nonprofit) **decision maker who cannot personally gain from** more **efficient utilization of the resource, waste could occur**. The decision maker maximizes his advantage from limited property rights by minimizing his hassles (which he would face from hard decisions in reallocation) or by insuring his future job promotion (by giving in to the desires of politically powerful groups). SB.17 If rights are privately owned but not easily transferable (as in the case of agricultural water rights desired for industrial use nearby) another problem emerges. In this case, the farmer is forbidden by law to sell water to the industrial user (because unmeasured return flows might decline, injuring downstream holders of water rights). This prohibition may lead the farmer to irrigate wastefully and thus lose much water to evaporation, even though he would be quite willing to sell the water he consumes to the industrialists at a price both would find compatible. SB.18 In brief, when private rights are securely held by private individuals, but easily transferable, the resulting pattern of resource utilization would be difficult to improve upon. This follows directly from the fact that resources are easily mobile, markets provide clear and condensed information on relative values, and each person has the incentive to seek out and fill (and profit from) better uses for each resource.\*5 The next two sections will point out in some detail the problems which result in both the market and nonmarket sectors when property rights are undefined, unenforced, not owned by private parties, or when transfer is impeded.

## Democracy NB

Private property rights are key to democracy which is a prerequisite to solving the aff.

**Anderson and Huggins 3** writes[[40]](#footnote-40)

Improvement of the environment with income growth is not automatic but depends on policies and institutions. Economic growth creates the conditions for environmental improvement by raising the demand for improved environmental quality and makes the resources available for supplying it. Whether environmental quality improvements materialize or not, when, and how, depend critically on government policies, social institutions, and the completeness and functioning of markets. **Institutions that promote democratic governments are a prerequisite for** sustainable development and enhanced **environmental quality. Where democracy dwells, constituencies for environmental protection can** afford to **exist-without** people **fearing arrest or prosecution**. The democratization of thirty-plus countries in the last twenty-five years has dramatically improved the prospects for environmental protection (Desta 1999). In the other direction, **dictatorships and warlords burden people and environments** in many regions of the world such as China and much of Africa. Zimbabwean president Robert **Mugabe**, for example, has clearly **indicated** that he has **no intention of respecting property rights** or the rule of law. His "terror teens" have brutally killed innocent people, and **his "land reform"** plan **demands that** more than **20 million** of the 23.5 million **acres** under private ownership **be surrendered without compensation. Mugabe's assault on private property has** also **taken a toll on wildlife, for without landowners, there is no one to protect them from poachers.** Before Mugabe's attack on private property, Zimbabwe had previously shown the world how to balance economic development with conservation through private and communal ownership. The CAMPFIRE program, for example, championed by the World Wide Fund for Nature, allowed local communities to manage wildlife. Hence wildlife became an asset as villagers in communal areas profited from hunting and photo safaris. Elephant populations mushroomed and poaching plummeted. But Mugabe has duped the poor people of Zimbabwe into thinking that land redistribution without compensation or due process is the key to economic prosperity. In fact, **sustainable development will come only from stable property rights**. Unless the sanctity of private property can be reestablished in Zimbabwe, its people and its wildlife will continue to suffer. Environmental degradation does not stem from the actions of the first world but rather from jumbled bureaucratic systems-often the result of well-meaning but misguided intervention. In particular, lack of well-defined and adequately enforceable property rights restricts economic development and stifles entrepreneurial activity in many countries. The Peruvian economist Hernando **de Soto** (2000) estimates that people in the third world and in ex-communist countries hold more than $9 trillion in what he calls "dead capital"-property that is owned informally, but not legally, and is thus incapable of forming the basis of robust economic development. He **advocates** the **formal recognition of property rights** in these countries **as an indispensable prerequisite for liberal democracy.**

Russia proves. Property rights are a prereq to democracy being viable.

**Anderson and Huggins 3** writes[[41]](#footnote-41)

**When the eastern bloc countries were freed from communism,** Milton Friedman called for free markets, saying, "Privatize, privatize, privatize." After more than a decade of experiments trying to create markets, however, he has modified his position, asking: "What does it mean to privatize if you do not have security of property, if you can't use property as you want to?" (Friedman 2002, xvii). **Russia**, for example, **was able to create a democracy but no rule of law to protect private property. Corruption is prevalent and Russia's economy has imploded**. This does not trivialize its democratization efforts, but rather emphasizes that **without** the rule of law and **protection of property, democracy by itself cannot bring** automatic **prosperity.**

# Frontlines

## AT Perm: Do the CP

Normal means for sustainable development is top-down regulation.

**Anderson and Huggins 3** writes[[42]](#footnote-42)

The focus on center stage should be on promoting institutions that empower people both politically and economically. These institutions allow people to improve environmental quality indefinitely into the future. This stands in sharp contrast to the undying conclusion of the doomsayers for whom the environment and the plight of human beings will always be worse. Doomsayers continue to profess, as they have since Thomas Malthus, that exponential economic growth and consumption will ultimately run up against resource limits. Paul and Ann Ehrlich (1996, 11) are perhaps the gloomiest. Humanity is now facing a sort of slow-motion environmental Dunkirk. It remains to be seen whether civilization can avoid the perilous trap it has set for itself. Unlike the troops crowding the beach at Dunkirk, civilization's fate is in its own hands; no miraculous last-minute rescue is in the cards. . . . even if humanity manages to extricate itself, it is likely that environmental events will be defining ones for our grandchildren's generation-and those events could dwarf World War II in magnitude. Those with this mind-set often call for more government regulation to stop growth and curb consumption. For example, Klaus Töpfer (2002, 1), the Executive Director of the United Nations Environment Program (UNEP), hopes to create a "model for international environmental governance." **Implicit in** the definition and use of **the term sustainable development is** the acceptance that market systems fail to promote sustainability and therefore **that command-and-control regulations are necessary** to achieve the goal of sustainable development. Agenda 21, for instance, adopted at the 1992 Earth Summit in **Rio** de Janeiro **calls on governments to "create national** strategies, plans, and **policies"** for sustainable development. **The solution offered by those who follow this interpretation is** to impose **top-down** measures such as **restrictions on** the **use of resources**, interventions in the behavior of multinational companies, and restrictions on international trade. Yet evidence suggests the contrary.

Normal means is mandatory government regulations. **Karkkainen 6** writes[[43]](#footnote-43)

The pioneering work of Ayres and Gertner in contract theory suggested that penalty default rules can create powerful incentives for parties to bargain for explicit contract terms and in the process force disclosure of asymmetrically held information necessary to an efficient contract.27 In contract theory, a penalty default rule is a gap-filling rule that intentionally imposes a harsh outcome on one or more parties, thereby creating an incentive to contract around the default rule in favor of an explicit alternative contract term.28 Ayres and Gertner argued that penalty default rules are especially appropriate in the context of information asymmetry, where the goal is to enhance efficient contracting by eliciting privately held information that one party might otherwise decline to reveal for strategic bargaining reasons. Their example-in-chief is Hadley v. Baxendale, 30 a nineteenth century contract case in which a miller sued a shipper to recover the lost profits resulting from delayed shipment of a replacement crankshaft necessary to run the mill.31 The court ruled that consequential damages could not be recovered absent a showing that the defendant was aware of special circumstances that might give rise to such damages.32 This, Ayres and Gertner argued, is a penalty default rule.33 Although the miller (and other similarly situated parties) would prefer a rule allowing consequential damages for undisclosed risks, that rule would allow ultrasensitive parties to shift the risk to an unsuspecting shipper simply by remaining silent about their unusually large potential losses. Under the Hadley rule, ultrasensitive parties are penalized for nondisclosure. Consequently, they will either disclose to enable consequential damages under the Hadley default rule or bargain around the default rule to reach an explicit alternative contract damages term. In the course of that bargaining, the shipper is almost certain to demand disclosure of the extent of its potential liability. Because penalty default rules create an incentive to disclose this somewhat asymmetrically held information, Ayres and Gertner described them as information-forcing.34 Unlike contract law, which consists primarily of interpretive or gap-filling default rules that apply in the absence of an explicit contract term,35 **environmental regulation typically starts from** the premise that **mandatory legal rules** are required to alter the behavior of self-interested parties who otherwise would be inclined to externalize the environmental costs of their activities. **Most environmental rules tackle this challenge head on: a governmental authority issues an authoritative command that prescribes directly and in detail** the **behavior that must be undertaken** or avoided **under pain of** coercive **sanctions** for noncompliance. In some cases, however, regulatory rules are designed to operate as default rules. Regulated entities have the option to avoid compliance with these rules by “voluntarily” undertaking a self-initiated alternative course of action that under specified conditions may be a satisfactory substitute for the otherwise applicable rule. Regulatory penalty default rules are a specialized subset of the broader category of regulatory default rules.36 A regulatory penalty default is a default rule that imposes harsh terms, creating an incentive for the regulated party to voluntarily produce an acceptable alternative—in effect, to bargain around the otherwise applicable regulatory requirement. Like their contract cousins, regulatory penalty default rules are information-forcing: to secure agency approval for the proposed alternative, the regulated party tends to disclose information it asymmetrically holds. Regulatory penalty default rules may also be information-forcing in the additional sense that they induce regulated parties to produce new information that may be required to construct the proposed alternative and secure its approval. This feature is likely to be especially useful when the regulated party does not presently hold the desired information but is the party best situated to produce it—a common occurrence in environmental regulation. Finally, regulatory penalty defaults—especially those that trigger at a future date if the regulated party fails to produce and obtain approval for an alternative in the interim—can have an action-forcing character: inducing the regulated party voluntarily to design and implement an alternative plan to avoid complying with the undesired default requirement.

Environmental protection entails government regulations. **Adler 5** writes[[44]](#footnote-44)

**The ecological critique** quickly **began to influence environmental policy and encouraged** the adoption of **land**-use **regulations** at the federal, state, and local levels. Political leaders warned of a “national land use crisis” and counseled that “land must be considered as more than a commodity to be bought, sold and consumed; rather it should be viewed as a finite resource to be husbanded.”35 As the ideas of environmental thinkers permeated the development of environmental policy, regulatory controls on private land use proliferated at the federal, state and local levels. Russell Train, Chairman of the Council on Environmental Quality under President Richard Nixon, explained the new policy agenda. Once, perhaps, it was enough to leave a property owner in virtually full dominion over his land. But that is no longer the case, and more and more people are recognizing that it is essential to extend the public authority over private land if we are to provide some order and preserve some beauty in the very complex urban society of the late twentieth century.36 The result was a “revolution” in land-use policy to address environmental concerns.37 A. The “Quiet Revolution” in Land-Use Control38 **As the environmental movement evolved** from a localized, conservation movement to a national political force in the late 1960s and 1970s, **there was a push for** a new generation of environmental **regulation at all levels of government**. While conservation leaders had long supported government land acquisition and careful reseource management on the federal estate, modern environmentalism called for greater regulatory control of private land. In 1971, the newly formed President’s Council on Environmental Quality (CEQ) declared that the nation was “in the midst of a revolution in the way we regulate the use of our land”39 – the so-called “quiet revolution in land-use control.”40 The Presidentially appointed Task Force on Land Use and Urban Growth noted that there was a “new mood” in the nation that “recognizes for the first time that decisions regarding the use of land will have a major impact on society” that led to a “wave of state land use regulation.”41 **Traditional notions of property rights**, economic laissez-faire, and local control **were discredited**, as “[t]he land market as it operates today, is the principal obstacle to effective protection of private open space.”42 Whereas land-use control had traditionally been viewed as an “urban problem” best handled by local zoning, policymakers saw the need for broader property restrictions.43 Local zoning was “inadequate to combat a host of problems of statewide significance,” and environmental problems in particular.44 The Task Force concluded that in order to “protect critical environmental and cultural areas, tough restrictions will have to be placed on the use of privately owned land.”45

## AT Perm: Do Both

Doing both leads to flawed environmental policies. The free market alone can solve the aff.

**Adler 2k** writes[[45]](#footnote-45)

Some environmentalists also see the strategic political benefit of market rhetoric and some free market policies. Ned Ford, energy chair of the Sierra Club’s Ohio chapter, argues that “by forcing the marketplace to the lowest cost solution that really works, environmentalists gain credibility and enhance the opportunity for further reduction.”24 Even President Bill Clinton has acknowledged the importance of developing a “market-based environmental-protection strategy,” noting that “Adam Smith’s invisible hand can have a green thumb.”25 Too often, however, market rhetoric merely merchandises government regulatory policies. **Environmentalist groups rarely adopt FME policies fully, opting instead to pick and choose free market precepts**. Attempts to use “market mechanisms” to reach predetermined environmental outcomes are the most common example of this tactic. The Environmental Defense Fund (EDF), for instance, advocates widespread use of “pollution credit trading” as a market-oriented policy. Setting an emission level as an environmental target, the EDF proposal allows companies the freedom to determine how best to reach it. Companies could buy and sell emission allotments among themselves to find the least-cost means to reach a goal set by government regulation. Explains EDF’s Dan Dudek, “Who is better to know [what to do] than the people who own and operate” the facility causing pollution?26 FME advocates note that **this approach will not necessarily produce sound environmental policy. The Clean Air Act Amendments** of 1990, for instance, **include** an elaborate EDF-designed **pollution-credit trading** scheme **for sulfur oxide** emissions to control acid rain. **Many companies favored the policy because**, by allowing them to select the least-cost pollution reduction measures, **they might save millions** of dollars **in compliance costs. But** was a sulfur oxide emission reduction plan needed at all? **The most extensive US study of acid rain** to date **suggests that acid rain was not a substantial threat to forests and streams**, despite environmentalist claims to the contrary. John Baden warns against market mechanisms that are used “simply as tools for the efficient delivery of environmental goals…[while] the goals themselves remain collectively determined.”27 CEI’s Fred **Smith calls such policies “market socialism**,**” as they resemble** the **efforts in Communist countries to use market mechanisms to reach politically determined production quotas**. EDF’s emission trading scheme is structurally the equivalent of the tradeable wheat production quotas established in parts of Eastern Europe. Notes Smith, “the efficiency gains of market systems occur not only in production, but in allocation as well. This means that **markets are as effective at determining what is to be done as** they are at determining **how it should be accomplished.”**

Calling for government intervention whenever the free market fails is ineffective.

**Adler 2k** writes[[46]](#footnote-46)

The fundamental problem with existing environmental laws is that they embody a command-and-control, government-knows-best mentality. Conventional policy approaches proceed from the assumption that markets “fail” to address environmental concerns. **Government intervention is called for wherever market activities impact environmental quality. Yet there is no end to** the range of **private activities which generate environmental effects,** **and centralized** regulatory **agencies are ill-equipped to handle myriad ecological interactions triggered** or impacted **by private activity**. As environmental analyst Richard Stewart noted, “**the system has grown to the point where it amounts to** nothing less than a massive effort at **Soviet-style planning** of the economy to achieve environmental goals.”1 Stewart’s description is particularly apt. **The Soviet economic model, like the conventional approach to environmental protection,** was able to produce gains for a time. Collectivized agriculture did produce wheat—at least in the beginning. Over time, however, centrally-planned systems **collapsed under their own weight, revealing a bankrupt core**. As with the economic planning of the former Soviet nations, so too with the ecological planning of the federal regulatory state. There is a growing consensus that **federal regulatory policies are too costly and ineffective**. Regulations passed in the 1960s and 1970s are no longer generating satisfactory results. In many cases, **well-intentioned regulatory systems are** even **making environmental problems worse**. Dissatisfied with the status quo approach to environmental policy, a growing number of scholars and policy analysts are turning to the marketplace to address environmental concerns. They have found in what many call “free market environmentalism” a new set of policy approaches that reconcile human needs and environmental concerns. Grounded in property rights, voluntary exchange, common law liability protections, and the rule of law, free market environmentalism seeks to integrate environmental resources into the market system. Rather than regulate each new potential risk to environmental quality, free market environmentalists advocate the creation of institutional arrangements that facilitate private solutions to environmental concerns. **Markets are not perfect, but they are superior to the regulatory alternative.**

Imposing new environmental regulations kills growth. The free market is sufficient to solve the aff.

**Brown 99** writes[[47]](#footnote-47)

As increasing pressure from visiting business leaders and local citizens attests, Hong Kong, like all wealthy countries, is encountering fears over air quality, clean water, and waste disposal. To meet these challenges Hong Kong Chief Executive CH Tung has embraced the idea of "sustainable development." In his words this requires"a fundamental change of mindset," in the way Hong Kong businesses and government operate. Around the world **policies of "sustainable development" rest on the assumption that** current economic systems are bad for the environment and that **only through more government control will environmental quality be improved**. Enacting this policy could prove costly not only for Hong Kong's environment but also for its celebrated economic success. The good news for Mr. Tung and all of Hong Kong is that the twin goals of environmental protection and increased prosperity are not as contradictory as many environmentalists would have the public believe. A recent study by **Princeton** University **economists** Gene **Grossman and** Alan **Krueger found that "**economic **growth brings** an **initial** phase of **deterioration followed by** a subsequent phase of **improvement."** They found, for instance, that light particulates, a pervasive form of air pollution, tend to increase until a country reaches per capita income levels of around $9,000. After that air pollution declines as countries become wealthier. According to Grossman and Krueger "contrary to the alarmist cries of some environmental groups, we find no evidence that economic growth does unavoidable harm to the natural habitat." This relationship between economic growth and environmental quality, which resembles an inverted-U, has been found for many other environmental indices such as water quality and waste disposal-- both important concerns for a city such as Hong Kong. Perhaps more relevant to Hong Kong's future is a recent finding that **government efforts to regulate** environmental quality**, a cornerstone of** many **"sustainable development"** proposals**, can have a substantial negative impact on** economic **growth**. Another team of **economists found that American air and water regulations** had a total cost of about $320 billion and **decreased** American gross domestic product (**GDP**) **by 5.8%.** Even well intentioned regulations can have a negative impact on economic growth and thus unintentionally on desired improvements in environmental quality. A policy of sustainable development can also be harmful in its prescription to forgo economic growth in the name of preserving resources for the future. Forcing the current generation to conserve resources for the future is like taxing the poor to give money to the rich. Imagine how different Hong Kong would look today if fifty years ago its imperial rulers had decreed that Hong Kong must not use natural resources so that they would be available for future generations. In that case Hong Kong, then with per capita incomes lower than many Third World countries today, would never have been able to achieve the remarkable economic growth that has made it one of the richest places on Earth, with individual incomes as high as those in the United States and higher than in most parts of Europe. If Hong Kong only grows at a modest pace in the future, forthcoming generations will be much wealthier than even today's residents. Such wealth will allow them to achieve standards of living and environmental quality unknown to us today. Asking current residents of Hong Kong to sacrifice economic growth and opportunity for the sake of future generations would be like the United States and Hong Kong of today asking poor African nations to turn over their resources for our enjoyment, with no compensation. In addition to asking Hong Kong to give up growth for the sake of future generations, a policy of "sustainable development" involves reducing the environmental burden Hong Kong's economy places on its neighbors. Here Hong Kong's great success is truly in evidence. Hong Kong is much wealthier than mainland China and indeed most of the rest of Asia. As such it is in a position to worry more about the impact its neighbors have on Hong Kong's environment than vice versa. By continuing the **liberal** trade and **economic policies** that **have made Hong Kong the** envy and **model for** much of **Asia**, and indeed the rest of the world, it will help promote economic growth in the region and thus improved environmental quality for its neighbors and itself. As Hong Kong moves into the new millennium it has many advantages over most of its neighbors. Its **economic freedom and** consequent **wealth will not only allow** it to enjoy **increased prosperity** in the future **but also increasing environmental quality**. **Avoiding** the **temptation to impose new** layers of government **regulation on a system that has worked so well will be the main challenge standing in its way.**

Only the counter-plan can solve the aff.

**Anderson and Huggins 3** writes[[48]](#footnote-48)

Institutional reform is not free and many countries, for various reasons, resist reform that would improve problems related to human well-being. Perhaps the growing evidence that the protection of private property and growth-enhancing institutions are the building blocks of human well-being will persuade policymakers to reform their established systems (see Norton 2003). **Only by upholding** political and economic institutions that promote and protect **property rights will we** be able to **sustain** development and **environmental quality**. As the Friedmans put it: Our society is what we make it. We can shape our institutions. Physical and human characteristics limit the alternatives available to us. But none prevents us, if we will, from building a society that relies primarily on voluntary cooperation to organize both economic and other activity, a society that preserves and expands human freedom, that keeps government in its place, keeping it our servant and not letting it become our master. (Friedman and Friedman, 1980, 37). **It is critical that we focus our efforts on** developing and protecting the **institutions of freedom rather than** on **regulating** human use of natural **resources through political processes**. The environment is getting better not worse, and it will continue on this course if human ingenuity can continue to hammer out the institutions of freedom, namely **property rights** and the rule of law-institutions that **will provide the incentive for us to solve** whatever **environmental problems** might come our way. As we head into the next millennium, it becomes increasingly clear that the **progress we have enjoyed is primarily attributable to the free**dom of the **market**place and Milton and Rose Friedman have done much to ensure that we have come far on this path. It is important to continue their work by ensuring that the property rights path to sustainable development is made more visible in order to protect the institutions of freedom and the environment at the same time-only then can we have our environmental cake and eat it too!

## AT Socialism

Socialism is bad for the environment. Studies prove property rights are key to the environment. **Adler 1** writes[[49]](#footnote-49)

The comparison between private and political ecological performance is most stark when one considers the ecological legacy of the former Soviet nations. There nations were not without their environmental laws, but state control of the economy was also an ecological disaster. The fall of the Berlin wall revealed toxic pollution far in excess of anything that had been imagined. **Our worst ecological nightmares were the Soviet nations**’ environmental reality. In 1988 **a single Ukranian city**, Zaporozhe, **released toxic emissions equivalent to** approximately **one-third of** all **American emissions at the time**. Potable drinking water was scarce and **Soviet forests** were decimated. In just under thirty years, the Aral Sea was drained by 66 percent to subsidize irrigation, **and fish populations were decimated**. The **lack of private ownership left no one** with any **incentive to care about** preserving **ecological values. Socialist systems are** also **worse for environmental protection** because they sacrifice the natural ecological benefits of market-driven efficiency gains. In the simplest of terms, **market competition creates** tremendous **pressure to minimize costs, and that means** finding ways of doing more with less – **producing more** widgets **with less** material and **energy**. Over time, market economies produce a continued decline in the energy and material inputs necessary for a unit of industrial output. This can be seen in the replacement of copper with fiber optics (made from silica – i.e., sand), the downsizing of computer circuitry, the light weighting of packaging, the explosion of agricultural productivity, and so on. Less material is used and disposed of, reducing overall environmental impacts from productive activity. This same trend is rarely evident **in socialist economies** where, on average, **it took** nearly **three times as much energy to produce** a given unit of **goods or services**. Almost the same ratio existed for steel. **The key to** such **improvements is** a system of well-defined and enforced **property rights. International studies** of economic and environmental tends **demonstrate that “environmental quality and economic growth** rates **are greater in regimes where property rights are well defined** than in regimes where property rights are poorly defined.”

Central planning fails. The profit motive is key to reducing harms to the environment.

**Sheehan 2k** writes[[50]](#footnote-50)

The market-failure argument leads inexorably to central planning; any human activity with environmental impacts must be politically controlled. **Government is entrusted to** effectively **foster only** the **types of** economic **growth which are environmentally friendly**, while preventing the types that are not. Yet **no government has the capability of assimilating** the **vast amounts of** economic, technological, and scientific **data necessary** to make such determinations. The task of ecological central planning is no easier than economic central planning.20 If market failure was truly the cause of pollution, we would expect the absence of markets in the centrally-planned economies of Eastern Europe would have been environmentally beneficial. On the contrary, without the profit motive of the market, **some of the worst environmental degradation** in the world **occurred in the former Soviet Bloc**.21 **Central planning failed largely because it could not efficiently distribute resources**. Neither could it safeguard environmental resources. **Data from** sample **market and socialist economies shows that market economies become more resource-**efficient with economic growth. Socialist countries, however, are generally more resource intensive, even in times of recession.22 **Without** a **profit motive, there is little incentive for** political **owners of a resource to conserve for the future** in order **to maximize returns.**

## AT Free Market Bad – Ethics/Enviro

The counter-plan isn’t inherently unethical or worse for the environment. The aff’s governmental approach to moral values is arbitrary.

**Adler 2** writes[[51]](#footnote-51)

Anderson and Leal do make an effort to respond to FME’s critics. They explain that **reliance upon markets** and voluntary exchange **does not exclude** the use of **environmental or moral values. It does**, however, **require individuals** and groups **to support** their **moral preferences with economic activity**. If developers outbid environmentalists for a given tract of land, then allowing the developers to purchase the land is efficient. “**Turning moral values into political issues”** does not solve the problem, rather it **makes environmental policy “another form of rent seeking where**in **people with one set of moral values get what they want at the expense of others”** (p. 24). It would be wrong, however, to assume that property rights inherently advantage economic interests. **Individual property owners have ample opportunity to advance noneconomic values** on their own land, irrespective of whether economists (or politicians) believe it is wasteful. Thus, if Rosalie **Edge placed** a **higher value on preserving Hawk Mountain as raptor habitat than as** hunting grounds **or a development site**, she had the power to realize her preference. Such is the power of property ownership.

## AT Externalities

I control uniqueness—market failures occur now because of a lack of private property rights. Only the counter-plan can solve externalities.

**Pennington 5** writes[[52]](#footnote-52)

The emergence of free-market environmentalism represents a significant advance in how environmental problems are conceived. Building on the work of Ronald Coase (1960), Harold Demsetz (1969), and developments in public-choice theory, freemarket environmentalism suggests that the mere identification of market failures is not a sufficient justification for widespread government intervention. Insofar as **markets** are prone to **“fail” in the environmental sphere**, they do so **mainly because of** the **high costs of establishing private-property rights**. These **obstacles to market exchange prevent** the **successful internalization of spillover effects**. Transaction costs are not the sole preserve of the market system, however, and **we commit the “nirvana fallacy” if we suggest that the alternative** to an imperfect market **is a government immune from the same** sort of **problems**. Public-choice theory, in particular, suggests that the interaction of voters, interest groups, politicians, and bureaucrats is characterized by a distinctive set of transaction costs that may result in chronic examples of government failure. What we need, therefore, is a comparative framework for examining the extent to which institutional provisions in the private and public sectors encourage or inhibit the internalization of all costs. In this framework, free-market environmentalism has made a strong case for much greater use of private-property rights and “imperfect” market processes as an alternative to the regulatory state. Authors such as Terry Anderson and Donald Leal (2001) have documented numerous examples of environmental goods that can be and are supplied successfully in private markets, and **empirical researchers** examining state-centered models of environmental management **have highlighted numerous cases of government failure**. For land-based environmental assets such as forests and minerals, for example, evidence suggests that private-property solutions are highly successful in generating the necessary incentives that encourage resource conservation and help to overcome the problems of “free riding” associated with open-access conditions (De Alessi 2003). Thus, the record of forest management in Sweden under a predominantly private regime has been noticeably more impressive than the record of forest management under government ownership in the United States, Canada, and Great Britain. Similarly, the private ownership of wildlife in countries such as Botswana has had markedly more success in protecting stocks than government-sponsored trade bans on ivory products that have been put in place over much of Africa (Sugg and Kreuter 1994). Although proponents of free-market environmentalism recognize that environmental markets have limits owing to the prevalence of transaction costs, they contend that these problems are more likely to be overcome within an institutional framework supportive of private contractual arrangements. In this perspective, **all environmental externalities represent** potential **profit opportunities for entrepreneurs who can devise** ways of defining **private-property rights** and arranging contracts (via technological innovations, for example) **so that those currently free riding on collective goods or imposing negative external effects** (for example, water pollution) on their neighbors **are required to bear the full costs of their actions**. A land owner, for example, may introduce fences and install entrance points to the grounds of a park in order to exclude nonpayers from the park’s aesthetic benefits. Likewise, if technologies develop in the future that enable the “fencing” of the atmosphere, then entrepreneurs will have incentives to define property rights to the air and to charge those who are currently polluting without compensating those injured by their action. In the market economy, therefore, if people are imposing costs on others or are benefiting from the provision of certain goods without payment, entrepreneurs have incentives to find ways of eliminating such involuntary transfers over time. **The political process**, by contrast, **tends in its very nature to externalize costs** through the coercive mechanisms of collective decision. The **all-or-nothing nature of political decision making means** that once a majority coalition has been assembled, costs can be imposed on those outside the ruling group. As a consequence, politicians always have an incentive to find ways of externalizing costs—**providing benefits to some groups at the direct expense of others.** In light of these incentives, advocates of free-market environmentalism suggest that we should rely on government action only in those situations where it is inconceivable that a market solution might be forthcoming. At present, for example, transboundary air-quality management seems to fall in this category. As yet, technological developments have not allowed the effective “fencing” of atmospheric resources, so government action may be warranted as a last resort.

The counter-plan solves and EP regulations cause their own externalities.

**Johnson 92** writes[[53]](#footnote-53)

The traditional rationale for governmentally engineered environmental protection schemes is that polluters rarely bear the full cost of their pollution. 9 This notion of negative externalities suggests that government should regulate the quantity of pollution produced in order to avoid the problem of under-compensation of parties adversely affected by pollution.20 Without question, this argument has some merit; historically, many companies have escaped financial liability for the environmental damage they have caused.2 " Negative **externalities need not lead to expansive regulations**, however. **Were the government to** define and **protect** private **property rights** more effectively, private property **owners could seek compensation directly from polluters**.22 As discussed below, **such an initiative would allow property owners** a greater opportunity **to determine** the **actual value of the** environmental **resources** which **they control**. Although **government regulation** protects potential victims of negative externalities to some extent, the same regulation **creates externalities of its own**. For example, environmental **regulation often redistributes wealth** so as **to concentrate the benefits of environmental protection in certain interest groups, yet distributes** the **costs among the population at large.**

## AT Precautionary Principle

Regulating based on uncertainty kills tech innovation and raises prices.

**Johnson 92** writes[[54]](#footnote-54)

**The government should not predicate pollution control on** the **speculation** of harmful effects. To do so would cripple the search for valuable uses for our environmental resources. **Tech**nological **innovation requires that manufacturers take risks based on incomplete info**rmation**.** Product manufacturers accept the risk that some of their new products will prove harmful, subjecting themselves to strict liability for the harm which they cause." To require that no product may be released into the stream of commerce until all of its dangerous propensities are known and understood would restrict commerce unreasonably. At some point, the cost of paying for the potential harm of a new product is less than the cost of additional prevention. At that point the product goes to the market.32 **Restricting** the activities of **potential polluters because their pollution may pose a greater risk than is currently ascertainable imposes** the same type of **efficiency losses** on those polluters**, and inflates the cost of** polluters' **products unnecessarily.**

## AT Regulations k2 Efficiency

Environmental regulations are economically inefficient.

**Johnson 92** writes[[55]](#footnote-55)

**Efficiency gains from regulatory schemes may be illusory**, however. The regulatory model provides a prime opportunity for "rent-seeking" behavior on the part of interested groups. 58 The **lobbying** process **can involve tremendous transaction costs**. 59 Further, **because there is no guarantee that the legislative outcome will express** the **preferences of** the **affected parties** accurately, the **regulations may distort** the **economic incentives**. By and large, the legislative process spreads the costs associated with the regulatory model among the general populace. Generally, **taxpayers pay the costs of** formulating, enacting and enforcing **environmental legislation; yet the benefits** from the legislation **accrue to distinct individual parties.** For example, all taxpayers contribute to the financial cost of maintaining national parks, but only a fraction of those taxpayers visit the parks. **In private bargains,** the **interested parties must pay the costs of regulation.**

Government regulations can’t solve. 5 warrants. **Stroup and Baden 79** write[[56]](#footnote-56)

**Why are public officials not held more accountable for managing** natural **resources efficiently**, diligently, and in the best interests of all the voters**?** We can identify five components of the problem. **1.** The Rational Ignorance Effect SB.37 Citizens allocate their decision time and efforts, as they do all other scarce resources, toward those uses which yield personal benefits. Gathering and analyzing knowledge will be undertaken on those matters which are important to the concerned individuals and are significantly influenced by them. **The average citizen will** fail to study national water policy, not because it is unimportant, but because he will have virtually no personal impact on the policy. It is rational to **be ignorant about complex matters** which are **beyond one's control**. Although weather is the most important single determinant of a farmer's income in a given year, the farmer is rational to study fertilizer options and tax strategies instead of meteorology. The weather is simply beyond his control. Similarly, the same farmer will be rationally ignorant about most governmental policies. The exception is likely to be the tiny portion of government policy which influences the market for his own crop. In this case, he has a special interest. **2.** The Special Interest Effect SB.38 Whereas most citizens are rationally ignorant about most governmental policies, on any particular issue there may be small groups with strong enough interest on that narrow issue to have an impact. Local cattlemen, for example, may have a strong interest in how grazing rights are administered on federal lands. When the issue is sufficiently narrow (grazing rights, not federal lands policy generally) and when the personal interests of a small group are sufficiently large (a large portion of some ranchers' assets are leased federal grazing rights), then **a** narrowly focused but highly motivated **special interest** group **is likely to wield enormous** political **clout**. The group may support or oppose a politician (or a bureau, in the legislative process) over this one small issue. The **interests**, however large in total, **of the rest of the citizenry may have little bearing** on resulting policy in this particular narrow policy area.\*12 Of course, governmental policy in general is the sum of such narrow concerns. Another problem for a representative democracy is the fact that each citizen can normally vote, not on each issue separately, but for one representative (or executive) to represent him on all issues. **3.** The Bundle Purchase Effect SB.39 Even if every citizen could somehow study every issue, and even if special interests could not buy influence through campaign contributions or other forms of political support, each citizen would still face another serious problem in expressing his informed opinion on the thousands of issues arising each year. **The voter votes not on individual issues** (which stripmine controls? which groundwater policy option?) **but on one representative** to speak for him on every issue (the Democrat or the Republican?). The lack of precision in achieving one's input into the system is obvious. On this point, see Gordon Tullock, Private Wants and Public Means (1970), pp. 107-114. Again, the payoff to a citizen for being fully informed on most issues is reduced because the bundles of policy choice from which he must choose, in the end, is severely limited even if by some small miracle he were the decisive voter. **4.** The Short-sightedness Effect SB.40 If most people are ignorant about most policies—and many polls indicate that the average registered voter cannot name his current U.S. Congressman—then those policies whose major costs or major benefits fall in the futre will be even less well understood. Successful politicians and bureaucrats, to receive sufficient support, must show their supporters current net benefits. **Future generations cannot vote in current elections**. Thus **efforts on our resource base** which occur years down the road **will have relatively little impact now, unless individuals are willing to sacrifice** now for the future benefit of others. Such **decisions** sometimes occur, but they **seem less likely to conserve resources than private speculation** (discussed below) **which allows the speculator** a chance **to benefit himself while protecting resources for future** (sale and) **use**. Just as the Indiana woodlot owner can gain by selling wood to Texans, current private owners can gain by conserving or "hoarding" a resource which is becoming more scarce, and selling it later to other "hoarders" (speculators). By contrast, a current government decision maker can seldom gain political support by locking resources away from current voters to benefit the unborn. We can expect government policy to be shortsighted, especially in the long time horizons necessary for conservation and for many natural resource policies. **5.** Little Incentive for Internal Efficiency SB.41 **In the private sector, a firm that uses resources more valuable** (as measured by cost) **than** the value of what it produces (as measured by **revenue**) loses money and **goes out of business** (unless rescued by government or supported voluntarily as a charity). **No such "reality check" exists for government bureaus**. A sufficient base of political support is required instead. Seldom can the public sector decision maker benefit personally from greater efficiency in governmental units. **The political incentive is to expand rather than** to **economize**. The public choice literature, taking aproperty rights approach, is developing an increasingly sophisticated set of models to explain bureaucratic behavior. See, for example, Mique and Belanger, "Toward General Theory of Managerial Discretion" (1979), William Niskanen, "Bureaucracy and Representative Government" (1971), Gordon Tullock, The Politics of Bureaucracy (1965), and Oliver Williamson, The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm (1964). Realism of the Analysis SB.42 Is our analysis of government's inability to manage resources effectively too cynical? We think not. The scholars whose models we summarize here, have demonstrated (usually in areas of application other than natural resources) that their analyses have explanatory power as well as theoretical attractiveness. This way of thinking simply recognizes that individuals, not organizations or societies, make decisions and that in general, individuals act in their own best interest as they perceive it. To be useful and beneficial to society as a whole, an institution must succeed in connecting authority (command over resources) to responsibility (the capture of costs and benefits flowing from one's actions). **The market relies** up**on private property rights to hold each person responsible** for his actions. When rights are imperfectly defined, enforced, or transferable, we can understand why markets fail. **Representative democracy counts on informed voters and** their **elected representatives** to hold government decision makers responsible for their acts. **We can predict how** and why **this institution**, too, **will be imperfect**.

## AT Regulations (General)

Environmental protection laws in developing countries will epically fail

**EcoVitality 99** writes[[57]](#footnote-57)

INADEQUATE ADMINISTRATIVE CAPACITIES: Even the most enthusiastic and naive proponent of IEL should realize that **environmental protection is** a **complicated and costly** undertaking that must be maintained, revised, and renewed on a continuing basis. The **developing nations lack** the **requisite scientific knowledge,** managerial expertise, trained **personnel,** financial resources**, institutional frameworks**, political commitments, **and popular support** necessary **to implement effective environmental protection** programs on a wide scale. Legal pronouncements, no matter how sweeping and unambiguous, cannot serve as substitutes for these indispensable administrative requirements. Despite various "capacity building" programs initiated by the governments of developed nations and a variety of U.N. agencies and multilateral organizations, few if any poor states have acquired the technical, managerial, and financial capabilities to implement conservation measures on a broad front. Absent these capacities, ecological conservation cannot succeed no matter how sincerely the government and people of a nation may want to preserve their natural heritage. INADEQUATE POLITICAL COMMITMENTS AND POPULAR SUPPORT: **The** overwhelming **priority** of governments and entrepreneurs **in virtually every poor nation is to increase** economic growth and **development opportunities**. And **the** great **majority** of "common" citizens **are** so **caught up in day-to-day subsistence** activities that their priorities are also overwhelmingly economic. Given these priorities, **it is** a **very rare** occurrence indeed **when a**ny **development project is** stopped or **hindered by conflicts with** international and national **environmental laws**. In many countries, **most people damaging natural systems** or features **are not aware of** any **applicable conservation laws and would not consider them personally relevant** if they did know the laws. **Few if any governments in developing countries have a systematic plan for monitoring compliance** with their environmental laws or for enforcing the laws in the likely event of non-compliance. Even where widespread practices are known to be environmentally destructive and socially disadvantageous for most citizens, as in the contexts of cyanide and dynamite fishing, slash-and-burn deforestation, or toxic water pollution, governments in developing states very seldom interfere with flagrant violations of their environmental laws.

## AT Theory

The counterplan is important to discussions of environmental policy.

**Regan 11** writes[[58]](#footnote-58)

Curiously, **many discussions of environmental policy ignore Hayek’s knowledge problem, assuming** instead **that regulators** and politicians **will yield effective environmental results**. But alas, much server space has been occupied by those frustrated with the sad result of political environmentalism. Critics admonish free-market environmentalism because “complete information is impossible” in markets, but fail to apply the same logic to government. Whereas markets are by their very nature decentralized collectors of knowledge, **public officials are far from omniscient** or benevolent **purveyors of sound environmental policy**. Free-market environmentalism is already working to end overfishing, encourage resource stewardship, and increase stream flows, and the environmental community is beginning to recognize it. Fred Krupp, president of Environmental Defense Fund, recently remarked that “harnessing the power of the market is often the best way to achieve the greatest environmental benefit at the lowest cost.” **As we work on today’s environmental problems, we’d do well to accept free-market environmentalism** into the broader environmental movement.

Squo conservation policies fail. Debate about free market environmentalism is needed.

**Parmar 14** writes[[59]](#footnote-59)

FreedomWatch may recall that in October last year, Simon Breheny wrote about the Dallas Safari Club’s plans to auction off a permit to shoot one African black rhino. The sale of the permit would demand that the hunter conform to Namibian government regulations which stipulate only “old, non-breeding male [rhinoceros] that are not contributing to the population anymore” would be allowed to be hunted. In addition, all proceeds raised from the auction would go to the Namibian government’s continued conservation efforts. Amid the condemnation from some wildlife activists, the auction took place last Saturday with the permit selling for US$350,000 ($389,000). The auction serves as a step toward **free market environmentalism where environmental costs are internalised through** the **allocation of property rights**. In this instance, a rhino’s life has been given a fiscal, ‘tangible’ cost providing a means by which individuals can procure legal rights over the animal. Whilst seemingly counter-intuitive, the **principals underlying the transaction are promising for the conservationists’ cause**. As put by Ben Carter, executive director of the club “the whole model of wildlife conservation, of sustainable use conservation, is that if a resource has a value, it will continue to flourish”. **Current conservation efforts have largely failed us** with species such as the black rhino facing imminent extinction, urgency demands a new manner in which to approach conversation. **Free mark[et] environmentalism may** very well **be the answer we need and warrants further debate and discussion on how we can apply its principles to conservation efforts** today. You can read more about free market environmentalism here.

## NC Space Shell

Text: Developing countries should recognize a private property right in natural resources in outer space.

## Uniqueness

Space race between developing countries is inevitable.

**Chadha 2-4** writes[[60]](#footnote-60)

Politicians from across parties have voiced support of the mission. Both Manmohan Singh the current prime minister, belonging to the Indian National Congress party, and Nanendra Modi a candidate for prime minister in the upcoming general election, who belongs to the Bharatiya Janata party, have expressed excitement regarding the Mars mission, claiming that this advancement in science innovation will strengthen India’s position in the world. **The Mars mission** also **seems** to be **the next step in India’s** ongoing **space race with China**, although politicians are careful not to explicitly state as such. China launched a mission to Mars in 2011, which failed after the loss of an interplanetary probe. The Indian media has spoken of the underlying political implications of India’s relationship with China, and how **the Indian** space **program is creating competition in the developing world. Reporters have likened this** competition **to** a 21st century version of **the** earlier **space race between the U.S. and** the **USSR. With countries like Nigeria** also **launching** their own **space programs, India has competition from all sides of the developing world** if it wants to be a leader in science and technology innovation. However, Dr.Radhakrishnan denies China’s failed mission as being any motivation for India to decide to go to Mars, saying, “Each country has their own priorities, their own vision for the space program. India has its vision, China has its vision, we are pursuing our vision." It remains to be seen in the coming years, if the Mars Orbiter Mission will indirectly bring prosperity to India. Currently, the rocket is being monitored by from the Spacecraft Control Centre at ISROTelemetry, Tracking and Command Network in Bangalore, India. If everything continues according to plan, it will reach Mars before the end of 2014.

Developing countries are leading the way in space development now. NASA is comparatively losing momentum.

**Rathi 13** writes[[61]](#footnote-61)

This week's **launch of India's spacecraft to Mars should not come as a surprise**. Five years ago, the country sent a mission to the Moon. And going ahead, the Indian Space Research Organisation (ISRO) has bolder aims. In 2015, it plans to send a probe to Venus and then another to the Sun. A reusable launch vehicle is already in the works, something that NASA is letting SpaceX develop. These achievements, however, haven't stopped detractors from asking why **India is doing this** when a third of its people live below the international poverty line. The simple answer is **because** it makes economic sense, as **tech**nological **and social development go hand in hand. This reasoning has been embraced throughout the developing world. Investment from poor countries has helped double global** government **spending on space programs** in the last decade. It was $73 billion in 2012 but only $35 billion in 2000, according to a report by the space market consultancy Euroconsult. In that time, **NASA's budget fell from $18**.7 billion **to $17.7 billion. Countries like Bangladesh,** Laos, Indonesia, Malaysia, **Thailand, and Vietnam are leading the charge.** More than 70 countries now have space programs of some sort. India's success in space has proven to these countries that modest investments can provide big gains. The Mars Orbiter Mission, for instance, cost only $73 million. **NASA's next mission**, which **will not do a lot more**, is going to cost $671 million. **This mission may be part of India's competition with China**, but its real implications are broader. The Polar Satellite Launch Vehicle used to put Mangalayaan (Hindi for Mars vehicle) into orbit has a success rate of 95 percent in its 23 launches. The ISRO also has a private arm called Antrix corporation, which has launched French satellites. In 2012, Antrix helped an Indian private space company called Earth2Orbit use the Polar Satellite Launch Vehicle to put a Japanese satellite in orbit. With the world's eyes on the nation's frugal space technology, India is attracting investors beyond France and Japan. ISRO was founded in 1969. In the last 44 years, it has achieved remarkable feats on a shoe-string budget. India has its own satellites for communication, weather data, agricultural data, and military applications. ISRO's R&D has not just helped India remain a technologically advanced country, it has also saved lives. In 1999, a fierce cyclone hit India's east coast, killing more than 10,000 people. Earlier this year, an even more powerful cyclone hit the same region but caused only a handful deaths. One of the main reasons for this contrast is that India's improved weather-monitoring systems provided accurate early warnings. ISRO India's space ambitions are also indirectly responsible for other benefits. Bangalore, where ISRO is based, is the heart of India's high-tech industry. Before housing the likes of Infosys, Google, and IBM, it had been home to the Defence Research and Development Organisation and Hindustan Aeronautics Limited. If a Zambian nun were to ask ISRO's chief "Why explore space?" (just as one asked a NASA scientist in 1970), it seems that coming up with an explanation will be easier. ISRO's success means it can justify its spending without needing to invoke Carl Sagan's big-picture quotes. Of course, India cannot afford to ignore its poor. In September, despite fiscal difficulties, India signed the Food Security Bill which will provide food for about 800 million Indians at the cost of $20 billion (about 1 percent of India's GDP). In contrast, Mangalayaan cost only 0.4 percent of the bill's annual budget. Mangalayaan has already run into a glitch, and chance is not in its favor. More than half of the 40 missions to Mars have failed. But even if it does not reach Mars, it has already achieved one of its main goals. It has forced the world to pay attention to India's success in space.

**Net Benefits**

## Environment NB

### Pollution

#### Lunar Dust

Private property rights for space resources solve lunar dust pollution.

**Huebert and Block 7** write[[62]](#footnote-62)

**Roberts** also **sees a need for environmental regulation** on the moon **to prevent pollution from lunar dust**.63 The extent to which this would be a problem requiring regulation is, however, unclear, given the moon’s lack of an atmosphere. Further, **given the moon’s size and** its likely **sparse population** even **once humans** begin **exploit**ing **it,** it seems **those** using the moon for **mining** and those using it for recreational purposes or for a good view of the Earth **would rationally spread themselves apart**. With relatively few parties and a strong incentive to spread out, we can imagine that **parties might bargain in advance to avoid conflicts**, or later to eliminate them.64 Of course, to the extent that **polluters** (whether by dust, chemicals, radiation, or anything else) arrive at the moon first, they **may establish property rights** there **including the right to “pollute.”** Where no one has already homesteaded lunar or planetary land, a mine or factory owner may homestead an easement to emit dust and other potential pollutants over the surrounding area that his operation affects.65 Then, **new arrivals will know that they should not locate in the area the** established industrial **operation affects** unless they are willing to subject themselves to the industry’s byproducts. Not only is **this** philosophically sound from a property rights perspective,66 it also **should present little burden** in practice **because of the moon’s likely sparseness** for a very long time. **On the other hand,** where the **owners** of hotels, golf courses, “wilderness” preserves, and the like arrive first, they **will homestead** their land**, including the right not to be disturbed by pollution. Should someone trespass** upon their property **with** any form of **pollution, they will be entitled to** both **damages and** injunctive **relief**, just as pollution victims were in Great Britain and the United States through the 1830s.67

#### Other

Other types of pollution are either impossible or non-unique in space.

**Huebert and Block 7** write[[63]](#footnote-63)

Considering the solar system’s present and future environmental state, the idea of space pollution becomes absurd to anyone apart from those who believe that whatever is “natural” is best, including even the eventual frozen desolation of our solar system. The reality is that virtually nothing human beings could do to the solar system could likely make it less livable or less useful than it is now. **Air pollution?** As we have seen, **there is no air on the moon**— **and to the extent that our neighboring planets have an atmosphere** at all**, it is almost entirely carbon dioxide, which is toxic** and the bane of environmentalists here on Earth when it is produced by our automobiles.55 Thus, **nothing we could do** to other celestial bodies **could make the “air” more toxic** than it already is. **Water pollution? There is no surface liquid water**, anywhere but Earth. **Radiological pollution?** As we have seen, **there already is dangerous radiation in space against which humans must shield themselves**. The Mars atmosphere may limit the amount of radiation on its surface— but if one cannot live there anyway without special protection (given the poison-gas environment), just how much worse would some radiation here and there make the planet? Also, **Martian soil is believed** to be **highly toxic**, to the extent that it could even threaten completion of any manned mission there.56 Any human vehicles or structures there would have to be specially protected by something like “mega-Rust-Oleum” to avoid destruction from this planet’s violent sandstorms.57 Thus, **to speak of pollution** or contamination **of space in the abstract—apart from** human beings’ **property rights—makes no sense.**

#### Nuclear Power

The counter-plan solves radioactive waste from nuclear power.

**Huebert and Block 7** write[[64]](#footnote-64)

One of the most promising **use**s **for space is**, of course, as **a waste dump**. This **should be cause for environmentalist celebration**, not alarm. For example, rational observers recognize that **nuclear** electric **power is far better for the environment than fossil fuels, which pollute the air and cause** countless **health problems** for those of us who breathe in the pollution.68 **An important problem**, of course, **comes in** the form of the **radioactive waste** produced, which, though small in quantity, remains hazardous for a very long time.69 **Once space flight becomes** sufficiently **affordable, the answer of what to do with** this **waste becomes** simple**: send it on a long**, long **trip**.70 Who but the most fanatical “cosmo-centrist” could be disturbed by **send**ing all of our **toxic waste to**, for example, **Venus, a**n already **hellish place where no** human being or other **living creature will likely ever go**? **Even if we** were to **take the nuclear waste to** someplace humans might want to go, such as **the moon or Mars,** the **physical quantities** of such waste **are small enough that it would require only minimal space**.71 The only colorable objection to this is that the waste might pose a risk to people on Earth as it leaves the atmosphere (e.g., if the ship carrying it explodes or crashes, as NASA vehicles are wont to do72). But presumably that risk would ever decrease as the private sector moves further into the space transportation field and space technology advances. For example, a space elevator would not entail the high risks or costs of ordinary space flight.73 And, of course, **carriers of hazardous waste would be strictly liable** for any harm**—which, along with their financial investment, would encourage them to take extreme care**. Another potential benefit would be to move polluting industrial operations off-planet.74 Again, environmentalists who really care about well-being of humans or life generally (as opposed to rocks and dirt per se) should delight in this prospect.

## Space Exploration NB

Private property rights for space resources are key to space exploration which solves extinction. **Merges and Reynolds 97** write[[65]](#footnote-65)

As indicated above, first possession is often a poor way to allocate property. Nevertheless, three factors make it attractive in the space context. First, **allocation by first possession** is simple and **requires** very **little government involvement**. Aside from a method of recording claims and some threat or sanction to deter stronger second-comers from displacing rightful first possessors (discussed below), very little in the way of governmental authority is needed.39 Second, **its theoretical defect--too-rapid development--may be a needed countermeasure when people are** (inefficiently) **risk averse**, which is almost certainly the case **regarding space**-related **investment**,40 and when important non-economic goals are also served by development. **Given the reality of w**eapons of **m**ass **d**estruction **and environmental threats on earth**, it is plausible to assert that **encouraging space development might be a good insurance policy for** the **survival of the species**. 41 If special incentives are needed which might be viewed as excessive from the limited perspective of maximizing current expected net profit, then they may well be justified in light of the importance of this overriding goal. Finally, while the first possession method of land allocation dissipated frontier land values, it economized on enforcement costs in establishing land rights.42 Yet, the dissipation of frontier land values itself probably constituted non-trivial economic waste. In **space**, however, inefficient **races to claim and develop** space **resources will** come with a significant **spillover** benefit**:** the **development of more rapid and** more **diverse space ex**ploration **vehicles**. This is a very important difference from the land development analogies, where racing depletes fixed resources in the context of largely static technologies. In much the same way that **society** encourages technical progress through what might be described as "racing for patents," on the belief that the spillovers to society exceed the costs of racing, it **should consider encouraging a race ever deeper into space.**43Robert Ellickson has written that "[i]ndividual ownership . . . generate[s] some new transaction costs, mainly those arising from the proliferation of boundaries and ownership entities."44 For this reason, private ownership, at least where population growth begins to cause some degree of crowding, entails the creation of a system for proving title claims and keeping them straight--a deed registry.45 Note, however, that Ellickson provides an interesting prediction applicable to the space context: The efficiency thesis predicts that innovations in technologies for marking, defending, and proving boundaries lead to more parcelization because they reduce the transaction costs of private property regimes. According to this view, for example, Glidden's invention of barbed wire in 1874 should have stimulated more subdivision of rangeland in the American West. And this indeed appears to have occurred.46 According to this hypothesis, which is simply that legal rules maximize overall efficiency in closely-knit societies, property boundaries in space are important enough that we can expect innovations in the technology of marking, defining, and recording them, so that over time the task of keeping track of claims becomes cheaper and easier.

### Space Exploration Impacts

Space col solves multiple scenarios for extinction.

**Schulze-Makuch and Davies 10** write[[66]](#footnote-66)

There are several reasons that motivate the establishment of a permanent Mars colony. **We are a vulnerable species** living in a part of the galaxy **where** cosmic events such as major **asteroid and comet impacts and supernova explosions pose a** significant **threat to life on Earth**, especially to human life. There are also more **immediate threats** to our culture, if not our survival as a species. These **include** global **pandemics, nuclear or bio**logical **warfare,** runaway **global warming**, sudden **ecological collapse and supervolcanoes** (Rees 2004). Thus, the **colonization** of other worlds **is a must if the human species is to survive for the long term.** The first potential colonization targets would be asteroids, the Moon and Mars. The Moon is the closest object and does provide some shelter (e.g., lava tube caves), but in all other respects falls short compared to the variety of resources available on Mars. The latter is true for asteroids as well. **Mars is** by far the most **promising** for sustained colonization and development, **because it is similar** in many respects to Earth and, crucially, **possesses** a **moderate** surface **gravity, an atmosphere,** abundant **water and carbon dioxide**, together with a range of essential minerals. Mars is our second closest planetary neighbor (after Venus) and a trip to Mars at the most favorable launch option takes about six months with current chemical rocket technology.

Space col outweighs. Overly detailed impact predictions are improbable and create false perceptions of security.

**Yudkowsky 6** writes[[67]](#footnote-67)

According to probability theory, **adding** additional **detail** onto a story **must render the story less probable**. It is less probable that Linda is a feminist bank teller than that she is a bank teller, since all feminist bank tellers are necessarily bank tellers. **Yet** human **psychology** seems to **follow the rule that adding** an additional **detail can make the story more plausible.** People might pay more for international diplomacy intended to prevent nanotechnological warfare by China, than for an engineering project to defend against nanotechnological attack from any source. The second threat scenario is less vivid and alarming, but the defense is more useful because it is more vague. **More valuable** still **would be strategies which make humanity harder to extinguish without being specific to** nanotechnologic **threats - such as colonizing space**, or see Yudkowsky (this volume) on AI. Security expert Bruce Schneier observed (both before and after the 2005 hurricane in New Orleans) that the U.S. government was guarding specific domestic targets against "movie-plot scenarios" of terrorism, at the cost of taking away resources from emergency-response capabilities that could respond to any disaster. (Schneier 2005.) Overly detailed reassurances can also create false perceptions of safety: "X is not an existential risk and you don't need to worry about it, because A, B, C, D, and E"; where the failure of any one of propositions A, B, C, D, or E potentially extinguishes the human species. "We don't need to worry about nanotechnologic war, because a UN commission will initially develop the technology and prevent its proliferation until such time as an active shield is developed, capable of defending against all accidental and malicious outbreaks that contemporary nanotechnology is capable of producing, and this condition will persist indefinitely." **Vivid**, specific **scenarios** can **inflate our probability estimates** of security, **as well as misdirecting** defensive **investments into** needlessly narrow or **implausibly detailed** risk **scenarios.**

**Frontlines**

**AT Centralized Regs Good**

Centralized bureaucracy can’t allocate space resources effectively. Multiple warrants.

**Merges and Reynolds 97** write[[68]](#footnote-68)

Similar **difficulties** of unification **may confront** those who try to organize **an outer space resource allocation organization**. As attempts at multilateral coordination have demonstrated, **it is difficult to get diverse nations** together **to agree on** basic principles and procedures.7 This is especially true where there is considerable uncertainty over the future value of the activity being organized, as is the case with many **space resources** whose values are yet to be determined. It is natural for the parties to such negotiations to try to influence the structure of the resulting organization in a manner that reflects both their current and anticipated interests.8 **Since space ex**ploration **is an area with high** future **uncertainty**, coordination efforts in this field are likely to face difficulties. Multilateral **attempts at coordinated development often end in impasses**.9 **Some** of these **coordination problems result from differences between industrialized nations and less developed countries**. Barbara Heim points out three areas with potential as sources of mineral deposits (Antarctica, outer space, and the deep seabed) all share two fundamental problems that have frustrated agreement between industrialized countries and less developed countries.10 **One problem is** the **ability to determine a clear definition of** the **common heritage** principle.11 **The second problem is** the **lack of a workable management regime**, which has impeded cooperation among the countries. Although Heim suggests that adversaries may compromise and find a solution quickly, her own research illustrates there is little real hope they will do so.12 Heim argues that a regime should be structured so that both developing countries and wealthy, technologically advanced countries will ratify under a one-nation, one-vote system: "Preferably this system will provide immediate gains and control of development to the countries or entities that take the initial risks and will provide the developing countries with a future opportunity to take part in either the development or conservation of the areas."13 Yet, Heim gives no indication of any recent precedent indicating that such a scheme would have any chance of being created. In fact, **recent evidence indicates that countries are** only **too willing to take advantage of existing institutions to further self-interested goals**. This trend is especially clear in the space field. A recent article describes how the nation of Tonga successfully acquired six valuable orbital slots through the ITU allocation process, over the objection of INTELSAT.14 The author argues that Tonga's actions will affect the satellite telecommunications market and pricing tructure, and may even influence the identities of the players in the satellite area. The author concludes that this incident should serve as a wake-up call to the United States in particular, which has until now neglected to monitor the allocation process as carefully as it should have. **Even if a centralized institution could be created, rational economic agents can be expected to spend significant** sums of **money to influence** the **rights-allocation** process. The general nature of such expenditures, as well as the payoffs from them, are familiar to students of administrative agencies responsible for doling out economically valuable rights. For example, **consider** the **vast sums expended to influence** the **awarding of defense contracts**, or government computer processing services contracts. **It is wise** whenever possible **to avoid these expenditures and** instead **encourage activities that are more directly productive**. Thus, even though one must acknowledge that there might be significant advantages to convening a centralized agency to administer rights to outer space resources, it may be practically impossible to achieve consensus on the specific form such an agency will take. It may turn out to be wasteful to encourage the expenditure of resources on the rights-allocation process, **given that total expenditures for** all **space**-related activities **are limited.**

## AT Perm: Wilderness Preserves

Wilderness preserves in space aren’t key and fail. They’re also unjust.

**Huebert and Block 7** write[[69]](#footnote-69)

As noted above, Reynolds and Merges call for ten to fifteen percent of the moon (and presumably any other celestial body at which humans may someday arrive) as a “preserve.”75 They make no argument to support this view, however, and even explicitly state that they believe no such argument is necessary.76 The radical environmentalists go further, of course, and want earthly govern ments to declare all of outer space an untouchable “wilderness.”77 We find the alleged need for official wilderness preserves less obvious. Indeed, this seems rather a strange preoccupation. As we have noted already, **there seems to be plenty of room** up there **for everyone and every purpose** imaginable. Right now **space is de facto** 100% **wilderness preserve, and it is difficult to imagine humanity making a significant dent** in that number anytime soon. After all, even vast amounts of the relatively hospitable continents of North America and Australia have minimal population density, even excluding national parks and other areas governments have so far placed off-limits. **Environmentalists have** also **purchased land for** the purpose of **keeping it** vacant and **preserved on Earth; there is no reason they could not do so in space**—or rather than purchase simply homestead because it is there for the taking. **Governments have little** incentive or **ability to determine which parts of a**ny **celestial body are best** used **as wilderness preserves** or which are best put to other purposes.79 One can imagine that **such determinations may be corrupted by** the inevitable influence of **special interests**, just as special interests have influenced terrestrial environmental laws to the benefit of polluters.80 Indeed, the United States government’s management of its national parks has been dismal, as have the environmental records of governments, especially socialist governments, generally.81 Thus, **if optimal preservation** of that which is valuable to scientists and other admirers **of** pristine **lunar wilderness is the goal, the answer** again **is** strictly enforced **private property rights. It is** entirely **unjust for “wilderness” advocates to use government to prevent others from developing** their **property in space**. As Glenn Reynolds has noted, theirs is essentially an “aesthetic view masquerading as a religious one.”82 They may speak in terms of intrinsic value, but **they** really **seek to use the law to forcibly place their personal aesthetic preferences**—their own human desires— above those of others,and **above the welfare of the human race.** By and large they have been allowed to do this on earth, albeit only partially. Unfortunately, there is no reason why space should be any different. As we have seen, however, in space there is even less cause to cater to their desires. Perhaps, then, they will not succeed as well in the heavens as they have on earth.

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