

Let's Reclaim The Commons

Facts & Footnotes

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Building Our Common Wealth

F Some early American states called themselves “Commonwealths” and made the government responsible to care for that common property for “generations yet to come.”

“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

— **Constitution of the Commonwealth of Pennsylvania.** http://sites.state.pa.us/PA_Constitution.html

Our Sky

F A study of similar programs by the think tank Resources for the Future shows that selling the permits at auction would be twice as economical to society as handing them out.

“We investigate the cost-effectiveness and distributional effects of three alternative approaches for distributing carbon emission allowances under an emission-trading program in the electricity sector. One is a revenue-raising ‘auction.’ The auction could be coupled with a cap on the maximum price for allowances, also known as a ‘safety valve,’ which has become known as the Sky Trust proposal. The second is ‘grandfathering,’ patterned after the sulfur dioxide (SO₂) trading program, which would allocate allowances on the basis of historic generation... Our main finding is that the auction is dramatically more cost-effective than the other approaches - roughly one-half the societal cost of grandfathering.”

— **Burtraw, D., Palmer, K., Bhavirkar, R. and A. Paul (2001).** “The Effect of Allowance Allocation on the Cost of Carbon Emission Trading.” **Resources for the Future.** <http://www.rff.org/Documents/RFF-DP-01-30.pdf>

F We're already trying something similar to control sulfur dioxide (SO₂) — a cause of acid rain. Here's how the rules work... The result: an extremely efficient way of reducing acid rain.”

See, for example, Richard Kerr.

— **Kerr, R. (1998).** “Acid Rain Control: Success on the Cheap.” *Science*, Vol. 282, 6 November, p. 1024-27.

F “By the law of nature these things are common to mankind the air, running water, the sea.”

— **Institutes of Justinian, Book II, Divisions of Things. (535 C.E.).**
<http://www.fordham.edu/halsall/basis/535institutes.html>

Our Fresh Water

F The United Nations predicts that by 2025, nearly two-thirds of the world will face water shortages.

“In fewer than 25 years, about 5 billion people will be living in areas where it will be difficult or impossible to meet all their needs for fresh water, creating ‘a looming crisis that overshadows nearly two-thirds of the Earth's population,’ a U.N. report said.”

— **Kole, W. (2002).** “Early Warning On Fresh Water.” **Associated Press, 22 March.**
<http://www.cbsnews.com/stories/2002/03/22/tech/main504423.shtml>

F Societies through the ages have considered water a resource to be shared.

“In the eighteenth century, the American colonists borrowed the English law of riparian water rights, the legal theory that owners of land abutting lakes, rivers, or streams were guaranteed the ‘natural flow without diminution or alteration’ of the watercourse. The idea was that property was an estate to be enjoyed for its own sake and left undisturbed.”

— **Glennon, R. (2002). *Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters*. Washington DC: Island Press, p. 14.**

"Recently, when I was traveling to Rajasthan's capital, Jaipur, in western India, for a public hearing on drought and famine, I experienced the clash of these two cultures of water. On the train from Delhi to Jaipur, we were served bottled water, where Pepsi's water line Aquafina was the brand of choice. On the streets of Jaipur, there was another culture of water. At the peak of the drought, small thatched huts called *Jal Mandirs* (water temples) were put up to give water from earthen water pots as a free gift to the thirsty. *Jal Mandirs* are apart of an ancient tradition of setting up *Piyaos*, free water stands in public areas. This was a clash between two cultures: a culture that sees water as sacred and treats its provision as a duty for the preservation of life and another that sees water as a commodity."

— **Shiva, V. (2002). *Water Wars: Privatization, Pollution, and Profit*. Cambridge, MA: South End Press, p. ix-x.**

F But today the World Trade Organization (WTO) and North American Free Trade Agreement (NAFTA) are redefining water in commercial terms.

“International trade regimes like the North American Free Trade Agreement (NAFTA) and the World Trade Association (WTO) have already declared water to be a tradable commodity by classifying it as a commercial ‘good,’ a ‘service,’ and an ‘investment.’”

— **Barlow, M. and T. Clarke (2002). *Blue Gold*. New York, NY: The New Press, p. 97.**
See also: <http://www.mindfully.org/Water/Who-Owns-Water2sep02.htm>

F One result is that a California company is suing Canada for its refusal to allow bulk exports of water - a restriction that may not be permitted under the trade rules.

“The Canadian Government is considering its response to a legal attempt from a US firm which could force it to allow water exports. Sun Belt Water is suing Canada for up to \$10.5bn (C\$15.75bn) in compensation for Canada's refusal to allow it to buy bulk water. The suit has been filed under Chapter 11 of the North American Free Trade Agreement (Nafta).”

— **BBC (1999). “Canada faces water battle.” BBC, 24 October.**
<http://news.bbc.co.uk/1/hi/world/americas/483891.stm>

F In the U.S., half the population depends on water from underground aquifers.

“About 51 percent of the Nation’s population depends on ground water for domestic uses.”

— **U.S. Geological Survey (1999). *Ground Water*. U.S. Geological Survey, p. 3.**
http://capp.water.usgs.gov/GIP/gw_gip/gwgip.pdf

F For every five gallons we pump out, nature replaces only four.

“Nationally, water users in the United States extract about seventy-five billion gallons of water per day from groundwater aquifers. By comparison, the total national recharge is only sixty billion gallons of water per day.”

— **Thompson, B. (2000). “Tragically Difficult: The Obstacles to Governing the Commons.” *Environmental Law*, Northwestern School of Law of Lewis & Clark College, spring.**

F Markets for water transfers can be designed with social and ecological goals in mind.

See, for example, Brent Haddad and Robert Glennon. Haddad’s recommendations for designing water markets include: consider the scope and direction of water reallocation to be matters of public policy; allow irrigation districts to be full participants in transfers involving their own water; and require a land plan for each long-term

rural-to-urban transfer. Glennon's management prescriptions include: establish minimum stream flows; use financial incentives as a significant part of water policy; and whenever a water rights transfer occurs, require that a small percentage of the water be dedicated for environmental purposes.

- **Haddad, B. (2000).** *Rivers of Gold: Designing Markets to Allocate Water in California*. Washington DC: Island Press, p. 141-148.
- **Glennon, R. (2002).** *Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters*. Washington DC: Island Press, p. 217-222.

F “Western water law allows us to manage water rights, but not water resources... We hold onto these operating systems that are a century old and wonder why we can't solve our problems.”

- **Kitzhaber, J. (2003).** *Speaking at Salmon Nation Fireside Chat. Portland, Oregon, 3 October.*

Our Knowledge and Culture

F Concerned that the public domain continue to grow, our nation's Founding Fathers instructed Congress “to promote the progress of science and the useful arts” by offering short-term monopolies as rewards.

“The Congress shall have power... To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”

- **U.S. Constitution, Section 8, Article 1 (1789).**
<http://www.law.cornell.edu/constitution/constitution.article1.html> - section8

F Patents have been extended to realms like DNA, where they are likely to hinder, not stimulate, progress.

“The ‘tragedy of the commons’ metaphor helps explain why people overuse shared resources. However, the recent proliferation of intellectual property rights in biomedical research suggests a different tragedy, an ‘anticommons’ in which people underuse scarce resources because too many owners can block each other. Privatization of biomedical research must be more carefully deployed to sustain both upstream research and downstream product development. Otherwise, more intellectual property rights may lead paradoxically to fewer useful products for improving human health.”

- **Heller, M. and R. Eisenberg (1998).** “Can patents deter innovation? The anticommons in biomedical research.” *Science*, 1 May, Vol. 280, Issue 5364, p. 698-701.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?holding=np&cmd=Retrieve&db=PubMed&list_uids=9563938&dopt=Abstract

“Academic biologists routinely work with genes without so much as a second thought. They focus their attention on determining the function of the gene and the protein it produces, not on whether the relevant DNA is patented or not. According to some universities and scholarly associations, a recent federal appeals court decision means that the entire scholarly research community, not just biologists, will be spending a lot more time with lawyers to determine whether their investigations violate someone's patent rights.”

- **Stix, G. (2003).** “Sign Here: Will a scientist need a legal opinion before starting the next experiment?” *Scientific American*, June. <http://www.sciam.com/article.cfm?articleID=000F22CD-228A-1EB7-BDC0809EC588EEDF&catID=2>

“Barely had the last nucleotide in the genetic code of the SARS coronavirus been read when the race to claim the intellectual rights to the sequence began. And, among those filing was the US Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, in what was essentially a pre-emptive strike. CDC director Julie Gerberding told reporters last week that, in private hands, a patent on the viral sequence might delay the development and refinement of tests and treatments of the contagious pneumonia that has already killed several hundred people. Gerberding's admission gives tacit acknowledgement to a growing concern among biomedical researchers that broad patents on genetic sequences may, in some cases, have a stifling effect on research and negative consequences for public health... Policy-makers should investigate what checks and balances are necessary to ensure that the patent system continues to do its job of stimulating innovation for the public good.”

- *Nature* (2003). “Gene patents and the public good: A race to claim patents on the SARS virus raises questions about the patent system’s ability to cope with geonomics.” *Nature*, Vol. 423, Issue 6937, 15 May, p. 207.

“We note that many patents that assert rights over DNA sequences have already been granted but are of doubtful validity. The effects of many of these patents are extensive, because inventors who assert rights over DNA sequences obtain protection on all uses of the sequences. We conclude that in the future, the granting of patents that assert rights over DNA sequences should become the exception rather than the norm.”

- **Nuffield Council on Bioethics (2002)**. “The ethics of patenting DNA: A discussion paper.” **Nuffield Council on Bioethics, 20 July, p.xi.** <http://www.nuffieldbioethics.org/filelibrary/pdf/theethicsofpatentingdna.pdf>

F The copyright term has been extended 11 times since 1960, from 28 to up to 95 years.

“Since 1960, copyright terms have been extended 11 times, from 28 to 95 years and applied retroactively.”

- **Albanese, A. (2002)**. “Copyright in the Balance: LJ Talks with Lawrence Lessig.” *Library Journal*, 15 July. <http://www.libraryjournal.com/index.asp?layout=article&articleid=CA231610&publication=libraryjournal>

F “To such ludicrous proportions that it now often inhibits rather than promotes the circulation of ideas.”

“Over the past 50 years, as a result of heavy lobbying by content industries, copyright has grown to such ludicrous proportions that it now often inhibits rather than promotes the circulation of ideas, leaving thousands of old movies, records and books languishing behind a legal barrier.”

- **The Economist (2003)**. “A Radical Rethink.” *The Economist*, 23 January. http://www.economist.com/opinion/displayStory.cfm?story_id=1547223

F A roster of Nobel Prize-winning economists agrees.

“It is highly unlikely that the economic benefits from copyright extension under the CTEA [Copyright Term Extension Act of 1998] outweigh the costs.”

- **Akerlof, G., Arrow, K., Bresnahan, T., Buchanan, J., Coase, R., Cohen, L., Friedman, M., Green, J., Hahn, R., Hazlett, T., Hemphill, C., Litan, R., Noll, R., Schmalensee, R., Shavell, S., Varian, H. and R. Zeckhauser (2002)**. Amici brief filed in the case of *Eldred v. Ashcroft*, 20 May. <http://cyber.law.harvard.edu/openlaw/eldredvashcroft/supct/amici/economists.pdf>

F “Patents for living organisms impoverish human society ethically, ecologically, and economically.”

- **Shiva, V. (2001)**. *Protect or Plunder?* London and New York: Zed Books, p. 6.

Our Airwaves

F We handed out licenses in exchange for promises that broadcasting would serve “the public interest.”

“Each license granted for the operation of a broadcasting station shall be for a term of not to exceed 8 years. Upon application therefor, a renewal of such license may be granted from time to time for a term of not to exceed 8 years from the date of expiration of the preceding license, if the Commission finds that public interest, convenience, and necessity would be served thereby.”

- **Communications Act of 1934, Section 307(1) (1934)**. <http://www.gmtc.org/CA1934.htm>

F Broadcasters have shirked their public service responsibilities.

See, for example, these reports from the Alliance for Better Campaigns:

“Broadcasters have an explicit responsibility to serve the local communities to which they are licensed, as established by the Communications Act of 1934. The United States Court of Appeals upheld the localism provision in a 1956 ruling, declaring ‘the prime factor’ in broadcast programming regulation ‘is the presentation of programs

of local interest and importance.’ And the 1960 Program Policy Statement issued by the Federal Communications Commission (FCC) stated that the ‘principal ingredient’ of the public interest standard ‘consists of a diligent, positive and continuing effort by the licensee to discover and fulfill the tastes, needs and desires of his service area.’

“Preserving localism has been the rationale for other regulatory protections that local broadcasters have received. For example, in 1992, Congress passed ‘must-carry’ legislation that requires cable operators to transmit local broadcast channels on their systems. ‘A primary objective and benefit of our Nation’s system of regulation of television broadcasting is the local origination of programming. There is a substantial governmental interest in ensuring its continuation,’ Congress stated.

“In preparation for the six hearings on localism being convened by the Federal Communications Commission (FCC), the Alliance for Better Campaigns examined programming on 45 local television stations for the week of October 5 through October 11, 2003 and found there is a near black out of local public affairs. Of the 7,560 hours of programming analyzed, less than one half of one percent - 13 hours - were devoted to local public affairs shows.”

— **Alliance for Better Campaigns (2003). “All Politics Is Local: But You Wouldn't Know It by Watching Local TV.” Alliance for Better Campaigns.**

<http://www.bettercampaigns.org/reports/display.php?ReportID=12>

“Local television stations around the country jacked up the prices of candidate ads by an average of more than 50 percent in the two months before the 2002 election, exploiting the campaign-driven spike in demand... An Alliance survey of more than 37,000 political ads on 39 local television stations in 19 states found that the average price of a candidate ad rose by 53 percent from the end of August through the end of October of last year.

“Under the ‘lowest unit charge’ statute enacted in 1971, broadcasters are prohibited from charging candidates more for ad time than they charge their high volume, year-round advertisers. This provision was designed to ensure that candidates are not penalized by normal market forces for their need to advertise in a compressed period of time prior to an election. But the real beneficiary of the law is supposed to be the public. If it worked as intended, this provision would cut the cost of pre-election political communication – and in so doing, open up the political process to more candidates, provide voters with more information and more choice, and reduce the importance of special interest money.”

— **Alliance for Better Campaigns (2003). “Profiteering on Democracy: How the Television Industry Gouged Candidates in Campaign '02.” Alliance for Better Campaigns.**

<http://www.bettercampaigns.org/reports/display.php?ReportID=11>

F New technologies will allow us to maximize our use of the spectrum, freeing up new space for other channels.

See, for example, Kevin Werbach:

“We stand at the threshold of a wireless paradigm shift. New technologies promise to replace scarcity with abundance, dumb terminals with smart radios able to adapt to their surroundings, and government defined licenses with flexible sharing of the airwaves. Early examples suggest that such novel approaches can provide affordable broadband connections to a wide range of users. These are not just incremental advances. The fundamental assumptions governing radio communication since its inception no longer hold. The static wireless paradigm is giving way to dynamic approaches based on cooperating systems of intelligent devices. It is time for policy-makers to consider how regulation should change in response. The radio revolution is the single greatest communications policy issue of the coming decade, and perhaps the coming century.”

— **Werbach, K. (2003). “Radio Revolution: The Coming Age of Unlicensed Wireless.” New America Foundation and Public Knowledge, p. 1.** <http://werbach.com/docs/RadioRevolution.pdf>

F Estimates for the commercial value of the U.S. spectrum run as high as \$770 billion.

“When we put back together the separate segments of value we have calculated, we obtain the \$771 billion for potential total value to license holders of licenses for completely flexible licenses. This includes the market value of the licenses as of December 31, 2001, the extra value of the licenses to firms that are more than marginally efficient (producer surplus), and the extra value available in the next decade from liberalization of restrictions.”

— **Snider, J. (2003). “An Explanation of The Citizen’s Guide to the Airwaves.” New America Foundation Spectrum Policy Program. p. 23.** http://www.newamerica.net/templates/ssl_forms/download/airwaves.pdf

F One small piece of unlicensed spectrum is creating a boom in wireless computing called Wi-Fi.

See, for example, this piece by Michael Behar.

- **Behar, M. (2002).** “The Broadband Militia: A new breed of underground Internet entrepreneurs could end the recession. If only Washington would let them.” *Washington Monthly*, March.
<http://www.washingtonmonthly.com/features/2001/0203.behar.html>

F “They used to rob trains in the old west. Now we rob spectrum.”

“It is one of the great rip-offs in American history. They used to rob trains in the Old West, now we rob spectrum,” McCain said.”

- **Stern, C. (2000).** “Mixed Signals: Broadcasters' Promise of a Digital TV Age Has Not Been Met, And Now Congress Is Having Second Thoughts About Its Role.” *Washington Post*, 17 December.

Our Internet

F Until the 1960s, it would have been legally impossible - AT&T had a monopoly on the lines and no one else could use them.

Prior to the 1968 Carterfone decision by the Federal Communications Commission (FCC), “foreign” attachments to the telephone were not permitted. Jason Oxman writes for the FCC: “The Carterfone decision enabled consumers to purchase modems from countless sources, to install and use the modem without permission from the telephone company, and to use these modems to take advantage of an array of data services offered by a diverse assortment of service providers over their home telephone service. Without easy and inexpensive consumer access to modems, the Internet would not have become the global medium that it is today.” For a legal history of the creation of the Internet, see Steve Bickerstaff.

- **Oxman, J. (1999).** “The FCC and the Unregulation of the Internet.” *Federal Communications Commission, Office of Plans and Policy*, p.15.
http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp31.pdf
- **Bickerstaff, S. (1999).** “Shackles on the Giant: How the Federal Government Created Microsoft, Personal Computers, and the Internet.” *Texas Law Review*, Vol. 78, No. 1, November.
<http://www.bickerstaff.com/articles/bickerstaff199911.htm>

F Picture being steered by companies to one website over another. It would be like not being able to call Southwest for a reservation because your phone company had a deal with United.

From a speech by FCC Commissioner Michael J. Copps: “A *Washington Post* story got me thinking about this recently. Some of you may recall the scenario it depicted of someone trying to phone in an order for a down jacket from Land’s End, only to be told by the phone company that the call was being redirected to L. L. Bean, which had paid the phone company to be the exclusive purveyor of down jackets to its customers. It may sound far fetched but discrimination in less dramatic guise could soon be legal. Think about what could happen if your broadband Internet provider could limit or retard your access to, say, certain news sources or political sites. Or what if your provider decided that you couldn’t make use of new and improved filtering technology to prevent your children from cruising unprotected through the more obscene alleys of the Internet because it wasn’t their filter? Or what if it prevented you from using some superior spam-jamming technology that could eliminate all that clutter from your in-box because it could block their spam? Or what if your broadband Internet provider decided that it wanted to impose usage restrictions to prevent the use of Virtual Private Networks by small businesses and telecommuters? Or streaming video? Guess what? Some of this is already happening. And I am told there is already a healthy market out there for so-called ‘policy-based routers’ that allow providers to do all this.”

- **Copps, M. (2003).** “Remarks of Michael J. Copps, Federal Communications Commissioner: ‘The Beginning of the End of the Internet? Discrimination, Closed Networks, and the Future of Cyberspace.’”

Federal Communications Commission, 9 October. http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-239800A1.pdf

F Just as with other media, the Federal Communications Commission (FCC) is looking to allow a greater concentration of corporate control.

“Commissioner Michael J. Copps, in a speech at the New America Foundation, today warned that: The Internet as we know it is at risk. Entrenched interests are positioning themselves to control the network’s chokepoints and they are lobbying the FCC to aid and abet them... At issue are upcoming decisions at the FCC that will determine how much control companies will have over Internet access and their ability to discriminate against users, data, websites, or technologies. In the dial-up world, current protections require these companies to treat everyone equally. This equal treatment has contributed to enormous growth and innovation on the Internet. These decisions come on the heels of the FCC eliminating related media concentration protections.”

— **FCC News Release (2003). “FCC Policies that Damaged Media Now Threatening Internet: Commissioner Copps Asks in Speech ‘Is the Internet As We Know It Dying?’” Federal Communications Commission, 9 October.** http://www.newamerica.net/Download_Docs/pdfs/Doc_File_195_1.pdf

F “So blind are we to the possible value of a commons that we don’t even notice the commons that the Internet is.”

— **Lessig, L. (2003). *The Future of Ideas*. New York, NY: Vintage Books, p23.**

Our Public Spaces

F “Public space is the only place where the poor and the rich meet on equal footing.”

— **Penalosa, E. (2003). *Speaking at Invention and Innovation for Sustainable Development*. Temecula, California, 13 February.**

Let's Reclaim The Commons

F “Who owns the patent on this vaccine?” “Well, the people, I would say. There is no patent. Could you patent the sun?”

— **Murrow, E. and J. Salk (1955). *Speaking on the CBS program “See It Now,” 12 April.***

What Tragedy?

F Researchers around the world have found that, where traditional social systems remain intact, few commons fall victim to such selfish overuse.

“Four broad types of property rights have evolved or are designed in relation to CPRs [common-pool resources]. When valuable CPRs are left to an open-access regime, degradation and potential destruction are the result. The proposition that resource users cannot themselves change from no property rights (open access) to group or individual property, however, can be strongly rejected on the basis of evidence: Resource users through the ages have done just that. Both group-property and individual-property regimes are used to manage resources that grant individuals varying rights to access and use of a resource.”

— **Ostrom, E., et al. (1999). “Revisiting the Commons: Local Lessons, Global Challenges.” *Science*, 9 April, Vol. 284 Issue 5412, p278-282.** [http://www.consbio.umn.edu/CBclass2003/Communal management/1999-Ostrom et al-Revising the commons-Science.pdf](http://www.consbio.umn.edu/CBclass2003/Communal%20management/1999-Ostrom%20et%20al-Revising%20the%20commons-Science.pdf)

What's the Big Idea?

F “The true friend of property, the true conservative, is he who insists that property shall be the servant and not the master of the commonwealth.”

— **Roosevelt, T. (1910). “The New Nationalism.” *Speech at Osawatomie, Kansas, 31 August.*** <http://www.usembassy.de/usa/etexts/speeches/rhetoric/trnew.htm>