

Where distance is measured in hours, dollars per acre stay well below five figures.

CHAPTER 15

LAND: THE MORE PRISTINE, THE LESS PRICEY

Oil makes some rich, topsoil not so much, but every trillion counts.

“ECONOMIC LAND” CAN BE WET, BREEZY, EVEN ETHEREAL

Like weekend vacationers, from urban to rural we go. To complete the tallying of the worth of Earth in America, let's rope in the remaining rents found outside the city. In the countryside, humans utilize land to farm, to graze, to log, to mine, to drill, etc. On the cadastral map for an entire region, you see the labels for all the uses: residential, commercial, industrial, agricultural, pastoral, sylvan, mineral, etc.

Besides water, there are other fluids, like oil, plus the electromagnetic spectrum. Bigger picture, we must not only count the surface (like home sites) and subsurface (like oil fields). We must also count the supra-surface – the airwaves and soon the geosynchronous orbits.

Furthermore, land is not just acreage owned by individuals or households or families but also by nonprofits and for-profit businesses and corporations, plus governments. Most of the lands not yet counted are owned by the public, via our governments. You'd think we the people might like to know the value of our natural holdings. And that our public servants would be able to tell us.

TOP 10 PUBLIC TALLIERS OF PUBLIC LANDS

1. The USDA's Economic Research Service, unlike the USDA's National Agricultural Statistics Service, stepped up. They projected farm real estate to be \$2.6 trillion for 2020. Minus buildings, etc, worth at most 20%, crop land and pasturage together come to over \$2 trill. BTW1, owners rent out 40% of farmland; non-owners worked over half of cropland and over a quarter of pastureland (reminiscent of feudalism). BTW2, over the last 20 years, we've lost 31 million acres of farmland – about the size of Iowa – three acres every minute (human diners, take note).

JS: It's not just farmland whose value is judged by annual output, i.e., the harvest. Commercial sites, too, are determined by how much money merchants can make at the location each year. As they do for metro regions, some sources – like NASS above – give a figure for land and buildings, not land alone. For those estimates, researcher Merijn Knibbe suggests “applying a 20% haircut to distract the value of farm buildings” (in real-world economics review, issue no. 69) to calculate the value of farmland alone.

So 80% of NASS's 2016 figure is \$2,115,384,800,000 trillion. For 2017 using ERS's figures, \$3k times 911 came to \$2.80588 trillion. That's a pretty big one-year jump but the bigger number is more recent and used smaller aggregates which tend to be more accurate. Adding it to metro land (Albouy, Ch 13) puts the total for both city and country at \$33 trillion.

Moving from the big gorilla of private land to the little monkey of public land, value-wise. Acreage-wise, the US owns about 1/3 of America and from it raises revenue. Much public land is “unimproved.” Without much in the way of improvements, not subtracting their near-zero value does little to alter the combined total. In the boonies, almost all the value is from the land and resources. Life becomes easy, one hopes ...

2. The Bureau of Land Management, in the Department of Interior, has its National Integrated Land System (NILS) GeoCommunicator.

JS: A great name but I'll be dogged if I can find any land values there.

BLM also has “Public Land Statistics” which shows at Table 3-25 that the BLM, from its 1/3 of America, in 2014 collected for us citizens \$0.344t in 2014 and in 2015 got for us only \$74 billion.

JS: Billions? That's not much, and a huge drop from 2014 to 2015. Gee, how'd you like to have them as your steward; well, my friend, you do.

3. The Treasury has a Bureau of the Fiscal Service which produces a Financial Report of the United States Government. On Balance Sheets under Assets it has “Property, plant and equipment, net.” For 2017, they put it at \$1,034.5 billion (p 10 or 17). Later they separate out land at \$13.4 billion (p 83), exactly same

amount they gave to the cost (?) of land. “Property” probably includes “Federal Oil and Gas Resources” and “Coal,” but if not they found only \$47 billion for the former (p 197) and \$9 billion for the latter (p 199).

JS: In their scheme, land is a tiny fraction of property. One reason is they impute a huge cost to land. Of course, there is no cost to create land, so it must be what they’re doing to land. Further, their \$47b is well below the BLM’s \$74b. Both are too minuscule to be realistic. Neither would add much to the growing total, already in the trillions.

4. In the basement of the White House is the Office of Management and Budget. The OMB produces its “Analytical Perspectives” that has a section called “Federal Receipts.”

JS: While we could not find revenue from land or resources, a scholar told us he could for an earlier year; his estimate then was about \$0.5 trillion.

5. The General Services Administration (GSA) created a database they call The Federal Real Property Profile. FRPP presents its “FY 2016 Open Data Set.” In there is “Table 1: US and US Territories.” For FY 2016, they give land, excluding public domain land (which is huge), a cost, but not a value.

JS: How can an official “profile” or “data set” be so incomplete?

Not to be outdone by the executive branch, the US Congress also has its agencies who could have stumbled across the value of the land that makes up America.

CONGRESSIONAL ATTEMPTS – MORE DATA VACUUM

6. The Government Accountability Office (GAO) notes whenever a part of the government behaves irresponsibly, such as officials keeping lousy records. “About 34 percent of the federal government’s reported total assets as of September 30, 2016, and approximately 18 percent of the federal government’s reported net cost for fiscal year 2016 relate to significant federal entities that, as of the date of GAO’s audit report, were unable to issue audited financial statements...”

JS: An earlier GAO report gave a total for federal land but no key word is turning it up now.

“... significant federal entities ... were unable to issue audited financial statements ...”

– The Government Accountability Office’s website

7. The Congressional Budget Office in the past estimated that urban dwellers spend over 7% of their income on residential land and at least 4% of their income on other land costs.

JS: That’d be about two and quarter trillion dollars. Of course, country folk spend some of their income on home sites, too. And it’s not just housing costs – we pay for land whenever we pay for anything. When you pay for food, part of that payment goes for farmland. For gasoline, part of that payment goes to whoever owns the ground with oil under it. ... And so on.

8. The Congressional Research Service has published such reports as “Federal Land Ownership: Overview and Data.”

JS: Despite such an intriguing title, nowhere inside did it give the total value or price of all federally owned land.

9. The Library of Congress, of course, contains just about every word ever published.

JS: Ever try to wade through anything like that? The proverbial needle in a haystack. But the stack will still yield something of value eventually, one hopes.

There are more public lands whose location values may not have been included. The list includes: port districts, landing slots at airports, ship berths in harbors, boat slips in marinas, highway, bridge, and tunnel tolls, etc. While it’s a pretty extensive list, in the bigger scheme of things the values are not so huge that if they were overlooked, it’d not undercut the grand total that much.

Besides *terra firma*, there’s water; the 2nd most essential element of life. Every moment, we need air. Every day, every living thing gets thirsty. One hopes the given values of land and resources above would include access to water (where applicable), but they may not. If statisticians left water out, here are some figures from elsewhere:

10. The US Geologic Survey figures Americans in 2010 withdrew about 355,000 million gallons per day (Mgal/d) from surface lakes, rivers, etc, and from the underground water table. BTW, the biggest user of water – bigger by far than second place agri-business, bigger than farms, fac-

tories, mines, and homes put together – is *power plants generating electricity* and thereby needing cooling (which may be another good reason to go solar). Yet the USGS did not give a price. The University of North Carolina's Environmental Finance Center did: *one cent per gallon*.

JS: Multiplying by 365 days in a year, water prices out at \$472,948,750,000. Given that both the population and economy has grown since 2010, and that one penny is the absolute rock-bottom figure, it's easy to see a realistic value of \$0.5 trillion for water in 2018. Paid annually, that's not a price so much as a rent. Yet, that's for water out of the tap, while we want its long-term value, in the ground. For its value *in situ*, let's estimate a quarter-trillion bucks.

None of these results for the value of income from public land is really much help. But even these spotty returns *do* all add up.

DO AGENCIES CHECK THEIR SOURCES?

After all this – 10 official rural sources, 10 official urban sources, 10 academic articles, 10 popular press articles – what can we conclude?

For some public land, our public bureaucracies offer no totals. They leave it to the curious to add up the subtotals. Worse, the estimates by various agencies differ wildly. Which one of their competing figures is the most official and the most accurate?

Worse still, some of the official figures are suspiciously low. We the People (US/State/local Governments) own over a third of America. So, unlike one's private land, our public land can be so unprofitable?

In fact, no. The public agencies only count the rents and royalties they collect. They overlook the royalties *they fail to collect*. When one adds these unpaid still owed amounts, then the given value of public land rises appreciably.

A few episodes of large-scale corporations cheating the public out of their share have been reported by the mainstream press. Are those incidents the only ones? Or are they just the tip of the iceberg? How are we to know? And without knowing, how can we know the real worth of public Earth?

I am shocked... not really by the predictable greed and cheating of the unrestrained very rich. But, also, by the complicity of our public servants with a feeble enforcement system, compounded by their bad bookkeeping. They keep silent about the elite's breaches of contract, and silence is tacit consent. Then they declare that their total – missing so many data points (facts) – is the true, accurate total of the value of public land. To put it politely, doing so is at least sloppy and misleading, at worst seriously dishonest.

5 BEST PRIVATE TALLIES

All of the above except the US Geologic Survey get their info from assessors and appraisers who get their figures from actual sales (which is where the UNC EFC, above, get theirs for water). Since tabulating land value is their business, perhaps we can find a total at a professional organization.

11. The International Association of Assessing Officers has a great tag line: “Valuing the World.” So if anybody should know the worth of earth, it must be them, right? Well, their librarian might tell a member assessing officer, but not just anybody, at least not riffraff who aren’t paying any membership dues.

While assessors do their guesswork for government, appraisers do theirs for business. Let’s question those whose pay depends on their performance for their clients.

12. The American Society of Farm Managers and Rural Appraisers is very newsy and releases farmland aggregate farmland prices, but only to members.

13. The American Society of Appraisers has a nonprofit mission and they claim to work from basic economic theory and legal precedent. Plus, they’re the ones everybody else gets their numbers from. But they’ve not made available a solid number for the price tag of America’s land if it were for sale. Or the rental value if it were for leasing.

While that appraiser/assessor well is dry and despite the shoddy performance of our public agencies, I’m strangely buoyed. While our public servants and public savants bow to pressure and crank out distorted facsimiles of reality, others didn’t. Here are two.

14. Purdue’s Kevin J. Mumford in “Measuring inclusive wealth at the state level in the United States” provides inputs that come to \$533,305,319,000 in year 2000.

JS: His well over a half trillion dollars is much less than farmland in #2 above, likely due to the passage of time – 17 years. Over almost the last two decades, the acreage of rural land has decreased – due to sprawl, mainly – yet that very sprawl has driven up the value of the remaining rural acreage, especially close to metro regions. So, the value of non-farmed rural land would be significant but still unknown.

15. The Heartland Institute’s Richard Ebeling wrote “There is No Social Security Santa Claus” (2015 Dec 22). He noted the Feder-

al Government owns mineral reserves of copper, nickel, gold, zinc, platinum, lead, and silver, plus 257 million acres of grazing land and 250 million acres of timberland. He puts the price tag for all those natural federal assets at \$5.5 trillion. He said he used many official sources which, however, he did not name.

JS: Interestingly, \$5.5t is also the new record for all central banks' bonds that no longer pay interest but charge it against bondholders, to put the amount in context. So if Ebeling's \$5.5t is accurate (and he did do thorough research) that's a hunk of change. It's overwhelmingly immense yet overlooked and set aside by academics, bureaucrats, and journalists.

It would push the \$33 trillion above (Albouy's plus farms, mainly) to \$38.5t. The uncounted non-federal, non-agricultural rural land could push the total to \$40 trillion. The passage of time would by now (2019) have pushed it to the the mid 40s, nearly double Larson's \$23t (Ch 13), and at 10% yielding a rent total around \$4.4 trillion.

Recall the GAO's gentle critique of official figures (#6 above). We're not the only ones to notice flaws in public bookkeeping. We'll see what others have said about that. And add a new word to our list of key words: critique. We, at least, are free to follow the facts to wherever they may lead. No torpedoes for us to damn; full steam ahead to the truth inconvenient for some but liberating for all.