

# Of Geology and Human Wastes

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authors (with Richard W. Hazlett) of:

*The American West at Risk: Science, Myths,  
and Politics of Land Abuse and Recovery*

# The Official American Dream

Freedom of thought and action

Opportunities for all

# Morphs into The American Fantasy:

Accumulating Stuff =  
Life, Liberty, Happiness, etc.

# BUT

## The effects of Accumulating Stuff include:

- Depleted Soils
- Toxic Streams and Aquifers
- Toxins in Plants
- Air Pollution and Destabilized Climates.
- Species Extinctions
- Negative Human Health Effects
- Depleted Industrial Minerals & other Resources

# Waste is our economy's largest product

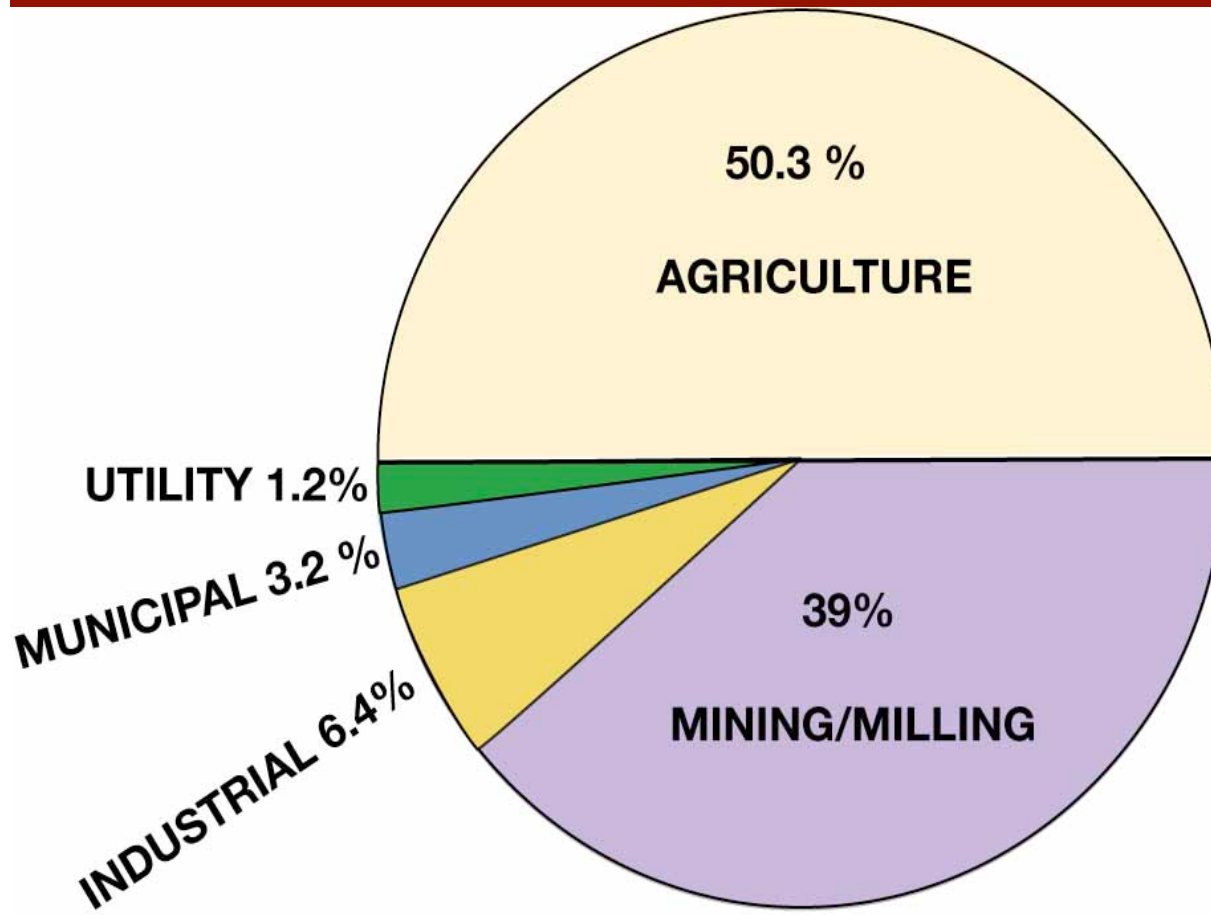
The U.S. economic model boils down to:

- Cut trees, mine minerals, pump oil, scrape land bare
- Manufacture ever-changing range of products, dwellings
- Incite consumers to continually buy, use, throw away, move
- Constantly “innovate” to drive consumption



# U. S. WASTES

about 1/4 TON per PERSON per DAY



- 23 million tons of municipal garbage
- 175 million tons of hazardous solid & liquid pesticides, fertilizers, car & road discards
- 18 billion tons of mining waste (rock, processed tailings, toxic waters)

Less than 2% is now being recycled

High consumption levels produce severe environmental pollution and (eventually) severely depleted natural resources (our “Natural Capital”),

Resulting in species extinctions, degraded human health... and (eventual) economic stress

# “Externalized” Costs of Development and Industry



Dump wastes into soils, water, and air (the “Commons”)

Ignore bad effects until they get too big to ignore (e.g. GHG emissions)

Avoid paying for cleanup — if even technically or economically feasible

# There is NO “Away”



- Atmosphere retains, concentrates greenhouse gases
- Ocean-dumped garbage floats back to beaches
- Soils transmit pesticide, fertilizer, nuclear waste (etc.) chemicals to groundwater
- Erosion transfers polluted soils to rivers
- Wind storms carry pollution around the world

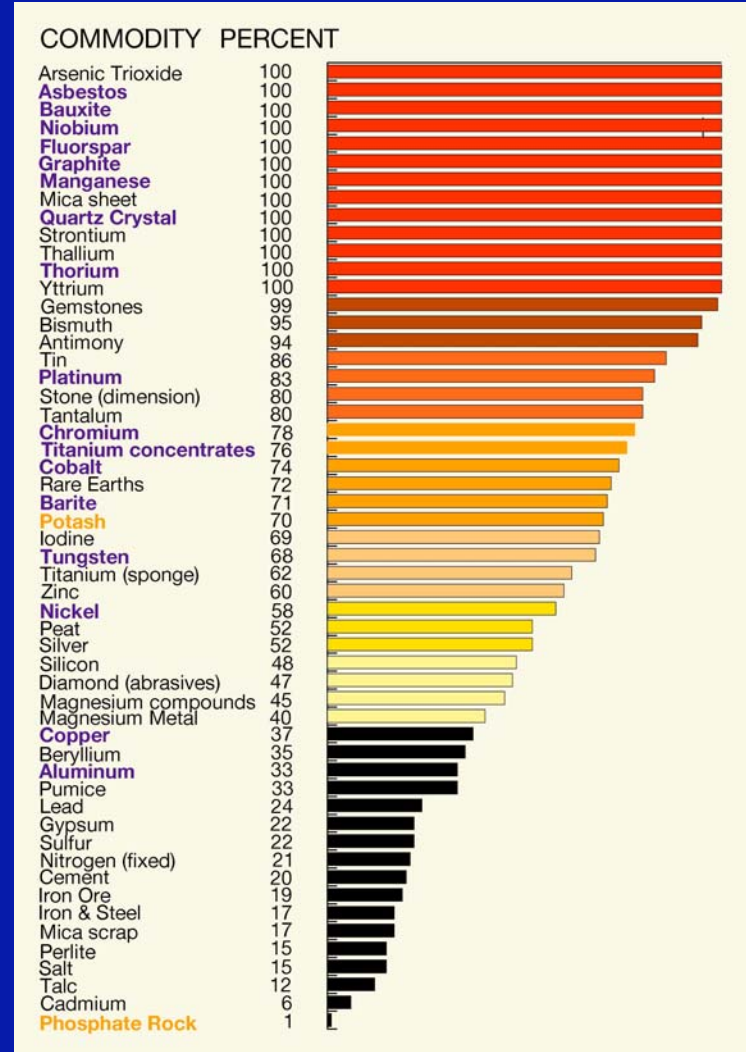
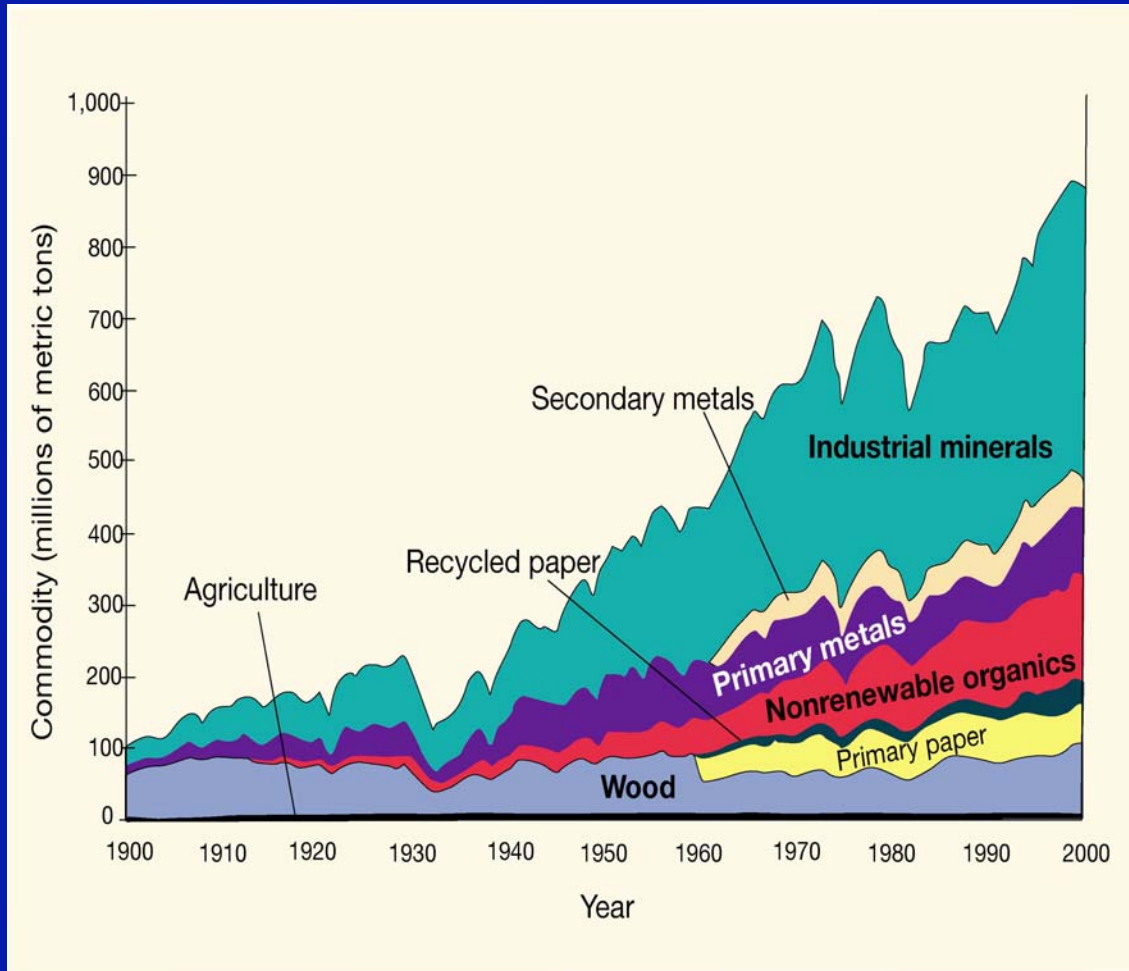
Seal Beach, So. Calif., Jan. 2010

# Resources In Peril (or Short Supply):

- Soils (the most ignored critical resource, which sequester CO<sub>2</sub> and filter water)
- Water (both surface and underground)
- Atmosphere (photochemical smog; ozone hole, GHG accumulation)
- Forests (which produce oxygen and sequester CO<sub>2</sub>, filter water, hold soils on slopes and absorb rainwater runoff)
- Metals
- Fossil Fuels

.....all from OVERCONSUMPTION

# Materials Consumption & Depletion



Left: As a result of growing U.S. consumption of non-fuel minerals,  
 Right: The U.S. currently imports 50 to 100 percent of its annual demand for many  
 critical materials (2002 data)

# Natural Processes = Critical FREE Life Support



Clark Mts., Mojave National Preserve, CA

# New EU Report on Deforestation

The disappearance of forests around the world is costing the global economy more than the current banking crisis.

The EU report estimates the annual cost of deforestation at between \$2 and \$5 trillion because of the importance of forests for producing clean water and absorbing carbon dioxide.

Compare to \$1.5 trillion in financial losses.

# Promoting the garbage economy:

Look Magazine  
May, 1970

## THE STORY OF THE DISPOSABLE ENVIRONMENT

**T**OMORROW'S baby may live in the same house you do. But he'll probably live in a totally different world from the one you live in. Because everything the baby wears or touches—virtually the entire environment in which he lives—can be disposable.

Why do we need a disposable environment? Consider this: in the first five years of his life, a baby will outgrow everything you buy him. He'll outgrow his bed three times, and his clothing up to eight times. Who, today, can afford to buy all the things a baby needs?

The answer, as the International Paper Company sees it, is practically everyone. Provided the things a baby needs are made of low-cost, disposable materials.

Take clothes, for example. A baby's wardrobe can start with our new Flushabye<sup>™</sup> diapers, made smooth as cloth yet actually more absorbent. And of course, totally disposable. And that really is just the start. Because Confil<sup>™</sup>, a new non-woven fabric from International Paper, can be made into just about everything else a baby will touch or wear. Sheets, pillowcases, blankets, shirts, sleepers, training pants. Confil can do anything cloth can plus one thing more. It can eliminate laundry and dry cleaning. Which, along with eliminating a mountain of work, can also prevent contamination in the clothes washer. Diaper rash may become a thing of the past.

Today's baby may well encounter Confil as soon as he arrives. A number of hospitals are already using obstetrical delivery packs (sterile disposable drapes, towels and table covers) and obstetricians' and nurses' gowns made from Confil and marketed by one of our subsidiaries. And both the baby and the mother may well be treated with our disposable medical instruments.

The idea of a disposable environment includes furniture, too. With International Paper Solid Fibre and corrugated board, we plan to be able to make nursery furniture that's colorful and sturdy. Yet it will cost so little you'll throw it away when he outgrows it. Bassinettes, cribs, chairs, bureaus, toy chests. They can all be strong, washable, scuffproof, nontoxic, and can even be made fire-retardant.

And by the time today's baby grows up, there's a good chance he may be moving into an entire paper world. Curtains, carpets, furniture, even whole houses made of "paper" will be taken for granted in the future. In fact, experimental low-budget housing developments of this kind are already being tested.

The disposable environment—the kind of fresh thinking we bring to every problem. Nice to know it's at your disposal, isn't it?

International Paper Company, 220 East 42nd St., New York, New York 10017.



**INTERNATIONAL PAPER COMPANY**

*where good ideas grow on trees*

# Garbage Economy, continued

International Paper Company's "Story of the Disposable Environment" helped 1970 *Look* magazine readers envision a glorious time when "...the entire environment in which [we] live" would be discarded. "Colorful and sturdy" nursery furniture "will cost so little, you'll throw it away when [your child] outgrows it...." and assured us that "Experimental low-budget housing developments of this kind are already being tested." (??)

IPC never addressed where the disposable housing, furniture, and hospital gowns, or the toxic chemicals used for processing raw materials and manufacturing products—or the fossil fuel emissions—would end up.

Clearly the U.S. is drowning in wastes. **We can and must abandon this model.**