

The Teton Mountains, center of land-use controversy over proposed extended airport nearby to handle commercial jets.

by John H. Douglas

"Between now and the year 2000, we must build again all that we have built before. We must build as many homes, schools and hospitals in the next three decades as we built in the previous three centuries."—Sen. Henry Jackson.

Not "will;" but "must!"—if we are to feed and clothe and house our people, educate them and treat them when they are sick. That will mean doubling the area now covered by our cities, more than doubling the total length of our freeways and setting aside possibly 3 million acres of land just for new highvoltage transmission lines alone. The question now fully dawning on the American people is: who will make the decisions involved, choosing which land will be strip-mined and which will not; which forests will stand and which be cut; where cities may spread and where they must be confined?

The answers to all these questions depend in part on legislation now pending in both houses of Congress-legislation whose importance, according to one respected Washington columnist, will ultimately eclipse the memory of 1973 as the Watergate year. But legislation is only the beginning.

Since pioneer days, land use in America has remained the province of individual opportunism, with only occasional, haphazard planning and virtually no planning legislation. The result has been an often humorous, frequently tragic mismatch of land, people and resources.

As summer evenings approach over San Francisco Bay, land, air and sea

exert their powers to create one of the great spectacles of nature. A unique fog, forming for hours over the ocean, begins to lunge through the Golden Gate. Faster than the small boat that tries to outsail it, the fog reaches first with narrow fingers, next with a full stream, toward Alcatraz Island, where it splits and spreads to cover what remains of the bay that was once the Gateway to the Pacific.

Now, however, of the original 680 square miles (including marshes, but not tributaries), only 400 to 420 square



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miles of the bay remain, with 188 square miles of that diked up as ponds to extract salt. Silt from mining along the tributaries, marshes diked and reclaimed for farm land, land filled to expand cities around the bay were consuming 2.300 additional acres a year until regulation began in 1965. And now the fog is almost indistinguishable from a thick yellow haze that can stretch from San Jose along the whole length of the bay and up the Sacramento River a hundred miles.

In an area not so blessed with natural variety, the booming development of Arizona proves nothing so much as the primacy of Barnum's Law among the great foundations of sociology: There must be a sucker born every minute.

Flagstaff, Ariz., has enough water to support 5,000 people. In winter, the population is 13,000; in summer, 23,000. Water has sometimes had to be shipped in by rail from over a hundred miles away. Still, the residents of Flagstaff are relatively lucky; unscrupulous land developers elsewhere have sold nonexistent "retirement estates" to unsuspecting oldsters with no water at all for a hundred miles. With over a million acres of new land already subdivided for sale in Arizona, and gimmick attractions like "The World's Tallest Fountain" (560 feet) and the resurrected London Bridge, the population could still "just kind of double or triple or quadruple," in the words of Arizona State Legislator Michael Goodwin.

In fact, both Arizona and the San Francisco Bay Area have taken steps to limit land abuse, and their successes and frustrations point up the need for national legislation on the matter. The Bay Conservation and Development Commission (BCDC) has now successfully limited bayfill to roughly 29 acres a year, with 92 percent of that going for public use. Using EROS satellite photos to help determine foliage and mineral composition of its land, Arizona has instituted the Arizona Tradeoff Model (ATOM) as basis for planning-and limiting-further development. To date, some 600 such regional councils have been established, and 44 states have initiated land-use planning programs.

But local, or even regional action is necessarily limited. Strict regulations on strip mining in one state, for example, may only lead to even more devastation of another, with economic chaos for both. Dams, pollution, forestation, urban growth are only a few of the matters now requiring broad land-use consideration, with a focus on the issue of how environmental and esthetic tradeoffs can be amicably negotiated.

Urban sprawl is particularly troublesome because of individul freedom of movement, the complexity of forces involved, and the sheer magnitude and unmitigated ugliness of what has been produced.

At the last census, for the first time, more Americans lived in the suburbs

than in cities or rural areas. As the trend toward outright abandonment of the inner city by affluent whites increased, eight of the nation's ten largest cities shrank in population while blossoming as ghettos. The nation's capital is almost three-quarters black with an almost exclusively black public school system. With their old buildings decaying and the new rising in vacant anonymity, once proud skylines grew indistinguisable from coast to coast. At night, the American downtown has degenerated from the "concrete jungle" of a decade ago to a virtual no man's land—a devastated, deserted hulk.

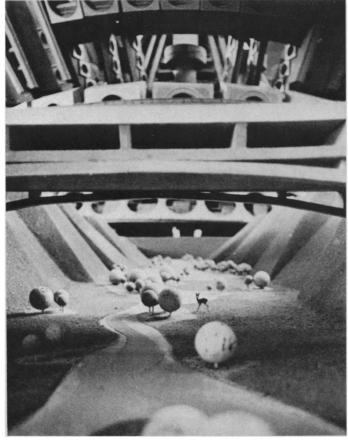
Fortunately, there are some signs of change. New state laws have encouraged condominiums, attracting some middle- and upper-income families back to the central city. One key to success in stopping urban sprawl is making apartment living attractive enough that people prefer it to commuting, and whereas only one out of five Americans lived in multifamily residences during the 1950's, about one-half do so now. Better alternatives to transportation by car can also help encourage city dwelling. San Francisco and Washington, D.C., are both working on major subway systems, and the number of bicycles sold to adults has jumped from less than a million in 1969 to more than eight million a year now.

Several European cities have made more progress than American cities in returning to urban life some semblance of human dignity. Outside Frankfurt, within easy access by trolley, lies a government-maintained forest with a variety of well-marked trails and a tiny restaurant that boasts (as do so many others) "the best Kirschwein in all Germany." Downtown Copenhagen is alive at night, from the Strøget shopping streets, where traffic is barred except for a few hours each day for trucks to reach the shops, to Tivoli Gardens where Mozart mixes nightly with rock and good Danish beer. Paris has decided that 13 is a lucky number for establishing its quota of shopping centers.

And in Moscow, a circular subway system, with spokes like a wheel, whisks commuters to almost anyplace in the city with only one transfer. As a FORTUNE magazine writer put it, European cities receive "the same loving attention that Americans reserve for a few 'eternal' national parks" before they "squander the nation's foreign exchange to traipse along boulevards abroad."

Another area of special national concern is the Federal Government's own land. Dozens of agencies now administer vast amounts of land with no central coordination or control. One agency alone, the Bureau of Land Management (BLM), controls one-sixth of the country's land resources, including over two-thirds of Nevada and Alaska. On

(Left) The city, present. Suburban sprawl from Washington, D.C., into nearby Maryland. Without a tree left standing from the decimated forest, the area has already begun to silt nearby streams. (Right) The city, future. Architect Paolo Soleri envisions compact, mile-high cities, surrounded by circular airplane runways (crossing foreground) all blending into a natural setting.

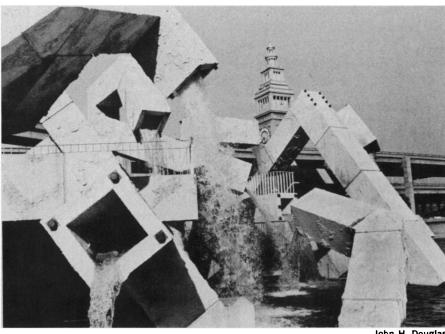


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the one hand, the agency is under pressure from conservationists to turn part of its land, containing Pueblo ruins and the world's oldest trees, into wilderness preserves or parks. On the other, the BLM has responsibility for the Alaska pipeline (a classic case of the dangers of limited planning, in which \$200 million of pipe was bought—abroad—before permission to use the pipe was given). Other agencies, including the National Forest Service (SN: 9/1/73, p. 138), face similar dilemmas, which they must meet with too little funding, too little manpower, and no overall Federal land-use policy. During the current debate, the whole concept of "multiple use" of publically owned land will have to be reexamined.

Finally, the nation is having to come to grips with its own illusions of "recreation." Driven from their despoiled cities, unable to creatively enjoy their "Golden Ghetto" in the suburbs, Americans have broken into chaotic retreat to the hinterlands—a retreat that signals, more than anything else, a vast attack on the nation's last great wilderness resources. The result has been the campground slum and the rich man's shanty. Seeking the simple life, they are willing to pay \$100,000 for an acre on remote Martha's Vineyard island or \$13,000 an acre for desert land near a ski resort where zoning restrictions prevent them from building anything on it. Two to three million Americans now own second homes with many more purchasing "investment lots" in out-ofthe-way places, in hopes of someday being able to join the Great American Exodus. (In California, less than three percent of such lots are actually built

All these problems will, of course, not disappear with the advent of new Federal legislation, but the new law, in whatever form it is finally passed, will



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The Villancourt Fountain of San Francisco. Built beside an ugly, elevated freeway (right), the fountain has helped bring life to a formerly seedy area.

surely have great impact and spark major new debate on how land will be used. Both Senate and House versions would authorize more than \$100 million a year for eight years to assist states in developing comprehensive land-use planning programs, increase coordination among various Federal land agencies, create a new agency to oversee land-use policy, and provide grants to Indian tribes to assist them in developing their reservations. The Administration predictably wants less money spent and opposes creation of the new agency. Current debate between the two houses of Congress centers on what sanctions should be applied to uncooperative states and what further studies of the whole land-use issue should be initiated.

But Federal action will not be enough; either the American people will adopt what naturalist Aldo Leopold called a new "Land Ethic," or land disethics will surely create more bizarre cities, more ticky-tacky suburbs and more wilderness slums. To the cities must be restored a modicum of dignity and a new sense of community; to the suburbs, a greater diversity of income levels and life styles; and to the wilderness must be restored the care that follows from what Leopold called an "ecological conscience" that "reflects a conviction of individual responsibility for the health of the land." Such health, he wrote, "is the capacity of the land for self renewal. Conservation is our effort to understand and preserve that capacity.'



As recreation demands rise, wilderness areas shrink. New legislation may help. The scene on this week's cover is taken from this painting by Charles Fracé, done exclusively for the National Wildlife Federation's 1973 Christmas wildlife stamps, which are sent to more than 6 million people as part of the organization's efforts to solicit contributions. For further information on its activities write to: National Wildlife Federation, 1412 16th St., N.W., Washington D.C. 20036.

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