old level, resulting in fewer lawsuits against airports for lowering property values; at the time, the agency had no inkling that residents might collect for mental and emotional stress as well. John Wesler, the FAA's director for environment and energy, says, "It was a lousy idea to ease the standard in the first place. The California decision makes it even worse."

The agency did not assert that jet noise is damaging to health, even though several studies—including three in Los Angeles—have suggested that airport neighbors suffer slightly impaired hearing and more deaths due to strokes and alcoholism. "These are not conclusive studies," says Wesler. "We're satisfied that health is not a factor here, although the Environmental Protection Agency differs.

Stress and annoyance is enough reason." Karl Krytor, an acoustical expert at the Stanford Research Institute, agrees. "Proof of what we generally call physiological ill health as being a direct result of noise exposure is not available for the average person," he testified in the California court case.

In the face of White House pressure and intense industry lobbying, the FAA had a difficult time holding its ground, and eventually it lost in both houses of Congress. President Carter signed the bill late last month, giving the airlines at least two more years (until 1985 or 1986 instead of 1983) to limit noise emissions on two- and three-engine planes, which compose 80 percent of all those in service. Four-engine planes must still comply by 1983, but most are expected to be taken out of service anyway, because they consume too much fuel.

Having successfully weakened the standards at the federal level, the industry intends now to go to the municipalities and insist that local action on noise has been preempted by whatever the federal government has done (or not done), according to a spokesman at the Air Transport Association. This is the argument advanced by Airwest against the Burbank airport, and it was also the defense of the city of Los Angeles in the suit over mental distress. But the California Supreme Court rejected that argument so firmly it bodes ill for such industry and airport arguments in the future. Recently, a lower court upheld the Burbank airport's right to enforce its own standards.

As a result of the weakening of federal standards, cities and municipalities may have little choice but to enact nighttime curfews or similar noise proscriptions. The only alternative is simply to buy up more land around an airport, providing a sort of noise easement; the Los Angeles airport alone has spent \$125 million for this purpose during the last decade, largely with federal funds.

But even an expenditure of that amount failed to prevent jet noise from reaching Edward R. Gaul, who lived several blocks from the airport's north runway. Gaul testified in the California case on one of the peculiarities of his life there: "When you are on the takeoff pattern, you have the low, rumbling, rattling booming . . . that goes on and on. When you are in the landing pattern, you get the screaming whistle. You can hear it from a distance but all of a sudden it swishes over you. It is two different kinds of noise, as far as I am concerned. They were both horrible." Gaul's family received \$5500.—R. JEFFREY SMITH

## Carter and the Environment

President Carter took a step toward strengthening his relations with the environmental community by receiving some 200 environmental leaders at the White House on 29 February for a "second environmental decade celebration."

In his speech before the environmentalists in the East Room, the President touched on several themes that are likely to be repeated again and again in this election year as he and his appointees seek to make the case that the Carter Administration is building an environmental record of historic significance. He said in part:

As our descendants look back on the 1980's, let it be said . . . that we protected the public health from the continuing dangers of toxic chemicals, from pollution, from hazardous and radioactive waste . . . that we preserved America's wilderness areas, and particularly its last great frontier, Alaska . . . that we put this nation on a path to a sustainable energy future, one based increasingly on renewable resources and on energy conservation . . . that we moved to protect America's countryside and coast-land from mismanagement and overdevelopment . . . that we redirected the management of the nation's water resources toward water conservation and environmental protection . . . that we faced squarely such worldwide problems as the destruction of forests, acid rain, carbon dioxide buildup and nuclear proliferation . . . and protected the habitat and existence of our own species on this earth.

The President called the water resources authorization bill just passed by the House a wasteful, inflationary, and environmentally destructive "travesty" that he intends to veto. Turning to the pending legislation to establish the energy mobilization board that he has proposed as a means of accelerating government permitting procedures for synthetic fuel and other non-nuclear energy projects, Carter sought to assure his audience that environmental standards will be observed. "I do not support waivers of substantive environmental standards, and I do not support broad grandfather clauses that are simply substantive waivers in disguise," he said.

Later, Louise Dunlap, director of the Environmental Policy Center, which leads much of the lobbying on environmental issues, said that she had already decided to support Carter for reelection. Despite some misgivings, most of the other environmental leaders seem likely to fall in with Carter, too, especially in light of the failure of Senator Edward Kennedy's campaign for the Democratic nomination to gain momentum.

The League of Conservation Voters recently rated Carter, Kennedy, and California Governor Jerry Brown as preferable to any of the Republican candidates, but gave Brown the top rating on the issues and indicated that, on their records, Carter and Kennedy are a toss-up for second choice (Science, 7 March). On the face of it, this effort at rating the candidates had the look of a naïve exercise in single-issue politics. The ratings do not appear to provide a measured evaluation of the candidates' strengths and weaknesses even in environmental matters.

For instance, by the environmentalists' own lights, the league's top rating of Governor Brown left a lot unsaid. A few months ago, Carl Pope, a Sierra Club lobbyist and political leader in California, observed to this reporter that Governor Brown was well in front of most other national politicians in taking enlightened positions on key energy issues—but he added that Brown was such a poor administrator that the state was better run when he was away from Sacramento on the campaign trail.—LUTHER J. CARTER