full year of operation after a trial go in 1975. No final verdict is yet possible on the work of the budget committees, which many insiders regard with reservations. But Congress did come very close

to meeting the deadlines it set for itself and adhering to the spending targets established as key parts of the budget regimen, so the maiden voyage can hardly be termed a failure. Amid efforts to restore luster to its public image, Congress was embarrassed by the sex scandal which resulted in the resignation of Wayne Hays, the willful chairman of the Committee on House

Bill Revising Clean Air Act Was Major Casualty as

Members of the 94th Congress packed their bags and headed home to campaign after completing a performance on the environment front that got mixed reviews. Some congressional staffers and members who had been slaving over unsuccessful measures thought the record dismal; environmental groups, however, generally thought the results respectable if not a cause for rejoicing. Several significant measures were passed despite what people on Capitol Hill said were unusually ferocious and effective lobbying efforts on the part of mining, oil, timber, utility, auto, and other interests—and in the face of an Administration whose reactions to environmental bills have ranged from reserved to actively hostile.

The biggest disappointment was the death of the bill to amend the Clean Air Act, which was 2 years in the making and which was filibustered off the floor of the Senate in the closing hours by the two senators from Utah, Republican Jake Garn and Democrat Frank Moss. The star achievement was passage of the Toxic Substances Act, which took 5 years to come to fruition (*Science*, 1 October). President Ford was expected to sign the measure, which had finally won broad support among all interested parties, despite the fact that he still clung to his objections to key provisions requiring premarket screening of all new chemicals.

Many of the congressional actions that environmentalists regarded as victories came in the form of the defeat of measures the Administration thinks necessary for energy independence—for example, the bill providing government subsidies for development of synthetic fuels, and the proposal for a \$100 billion "Energy Independence Authority." Most of the environment protection bills that had support, or at least little resistance, from the Administration related to the expansion of parks and wilderness areas.

The biggest reversal for environmentalists was the downfall of the Clean Air amendments, which were supposed to have come to a final vote during the summer (Science, 6 May). The law contained two major features. One was a system for classifying areas that now enjoy air quality better than statutory ambient air standards and ensuring that only minimal deterioration be permitted. The Environmental Protection Agency (EPA) already has regulations to this effect, promulgated as the result of a 1974 court case, but utilities and the Chamber of Commerce have been battling the law in hopes that the regulations will be nullified in an upcoming appeal to the Supreme Court. Then there is the matter of auto emissions. The compromise version of the bill would give auto makers a 1-year delay for compliance with the 1978 statutory standards for hydrocarbons and carbon monoxide, and further extensions for the nitrogen oxides standards. Auto makers said that was not enough time, so they gambled that if the whole bill were killed they could get the lawmakers to pass a separate, more lenient, bill just for them early next year. (Auto companies are in a potentially awkward position. They

have repeatedly insisted they had to know what to do about their 1978 models by 1 October. Now they know, and unless Congress springs to their rescue, they will find themselves in widespread violation of the laws.) Despite the intense lobbying by both auto companies and utilities, the bill would have had a good chance of passage had it not been for delaying maneuvers and a filibuster conducted by Garn, which resulted in the bill finally being removed from the floor. The bill's manager, Senator Edmund Muskie (D-Maine), is irate about the whole business, as are environmental groups.

Also unresolved this year was the fate of amendments to the Water Quality Act. The conference committee couldn't agree on several important issues, such as the extent of authority the EPA should have over management of grants to localities for sewage treatment plants. The main item of contention, though, was section 404 of the act that dealt with federal authority over the granting of permits for dredging and filling wetlands. Dredgers and developers have been trying to undo a 1975 court decision that broadened the authority of the Corps of Engineers to grant permits. The House bill sought to narrow it back down to apply to dredging near navigable waters and coastal wetlands; the Senate bill retains the broader existing program and splits permit authority between the Corps and the EPA. Environmentalists were glad to see this matter unresolved because they believe a more favorable measure can be developed next year when guidance will be available from the forthcoming report of the National Commission on Water Quality.

One of the major legislative achievements of Congress this year (and this one had Administration support) was the Resource Conservation and Recovery Act. What this measure does, in essence, is to give EPA its first real chance at regulating waste management and the disposal of hazardous wastes. The act establishes mandatory federal standards for the handling, transportation, and disposal of hazardous materials (such as poisonous chemicals, acids, and explosives); provides for grants to states to make plans for waste disposal and resource recovery (recycling); and authorizes \$35 million for fiscal 1978 to enable EPA and the Energy Research and Development Agency (ERDA) to do research, development, and demonstration programs for waste disposal and recycling. Environmentalists were disappointed that amendments spelling out container guidelines and mandatory deposits for beverage containers were defeated, but for the most part this measure has met broad

Another important piece of legislation was the National Forest Management Act. Some sort of timber legislation was regarded as imperative this year after a court decision that severely limited clear-cutting in national forests and had the whole timber industry in a swivet. Environmentalists seized the opportunity to push for what they regard

Administration. The House did put into effect reforms which had the effect of making its operations more open and less autocratic. On a number of matters involving ethical questions, however, the

legislators proved themselves still reluctant to be their brothers' keepers.

Legislatively, the landmark issue for the scientific community—at least symbolically—was the restoration of a science adviser's office to the White House. Congress and the President agreed on principles quite early, but the process required nearly the entire 2-year life of the Congress to complete. The delay was

Congress Compiled Mixed Record on Environment

as badly needed reforms in national forest management. The resulting legislation is a compromise between a mild-mannered Administration-backed bill and one that contained explicit guidelines on clear-cutting. It puts into law for the first time the Forest Service "sustained yield" policy (cutting no more in a given year than can be replenished), and curtails tree sales in marginal areas that cannot be reforested. Specific orders about clear-cutting were dropped in favor of language telling the Forest Service to be careful. A Sierra Club official says the bill "gives the Forest Service one last chance" to show it can manage clear-cutting responsibly, and he predicts the law offers new handles for "a number of productive lawsuits" next year.

Energy Directions Unclear

On measures relating directly to energy, matters seem to be at something of a standoff between environmental interests on the one hand, and the Administration and industry interests on the other. The President's veto of the federal coal leasing act (which tightens federal management of its coal resources) was overridden by Congress, but he had his wish when the latest version of a federal strip-mine reclamation act was allowed to founder for a second time in the Rules Committee. This law is regarded as crucial by environmentalists now that the way has been opened for leasing of coal-rich lands in the West. The proposed measure, already vetoed twice by the President, would supersede the patchwork of state laws now regulating strip mining and contains, among other things, stringent reclamation guidelines for private as well as public lands and provisions for protecting the rights of surface owners. The United Mine Workers had been supporting the bill until recently when it changed its stance at the behest of Eastern strip-mine operators. The Department of the Interior has maintained that its newly issued regulations for reclamation on public lands make a law

Another environmental defeat was that of the amendment to the Outer Continental Shelf (OCS) Lands Act, rejected by four votes in the House on 28 September. This bill would authorize the Interior Department to conduct exploratory drilling, change bidding procedures, add new environmental safeguards, and give states more say over the onshore aspects of offshore development. The Interior Department hates the bill, and oil companies have claimed it would cause them intolerable delays and expense.

On the plus side for environmentalists has been the defeat of several measures that would encourage what they see as reckless development of energy resources. The House, by a one-vote margin, voted not to consider a bill that would have provided \$4 billion in subsidies to industry for development of synthetic fuels. The measure, vigorously promoted by the Administration, would stimulate strip mining and oil shale exploration in the West.

Another subsidy bill that was defeated was the Nuclear Fuel Assurance Act, which would have provided \$86 million for uranium enrichment by privately operated companies, a development the Sierra Club said would lead to "environmentally unsound expansion of enrichment facilities."

Other developments pleased environmentalists. One was congressional failure to pass the ERDA authorization bill which would have provided funds for the controversial Clinch River breeder reactor demonstration program, and given ERDA authority to subsidize the commercialization of demonstration energy projects whose worth is open to question. Another encouraging sign was the Senate's failure to confirm the nomination of George Murphy, staff director of the Joint Committee on Atomic Energy, to the Nuclear Regulatory Commission. Murphy, a JCAE staffer since 1958, was regarded as being too pronuclear.

As for action on energy conservation, progress has been minimal. The notable exceptions are measures offering federal subsidies for energy-conserving technologies in building construction, and mandatory "performance standards" for new buildings.

The Congress seems to have made the most strides in areas, such as management of public lands where the members have not been besieged by frenetic lobbying. An important move was passage of an Organic Act for the Bureau of Land Management, which brings all BLM lands—comprising one-fifth of the nation's territory—under a single charter and enables the agency to recommend withdrawals of lands for designation as wilderness areas. Congress also tripled the money available for purchase of lands for parks and recreation, extended designations of wilderness areas, passed a bill to prevent mining in a number of national parks and monuments, and put a moratorium on existing mining claims in Death Valley National Monument.

Obviously, the next Congress will be confronted with a good deal of unfinished business, notably in air, water, strip mining, and OCS leasing. According to a spokesman for Environmental Action, environmentalists will be gearing up for a new assault on chronic problems—hammering away at the Highway Trust Fund to get money for mass transit, and pushing for more laws relating to nuclear proliferation and nuclear safeguards, to name a few. A Sierra Club worker observes that if President Ford is elected, the pro-environment forces will be mainly occupied in "defensive" actions; if Carter wins, they see opportunities for a great array of new initiatives.

There were quite a few close fights this year, and environmentalists feel that the balance sheet would look significantly different if legislators had not been dealing with a President who put a much higher priority on economic recovery than on environmental protection.

—Constance Holden