university officials defended the practice, they admitted that the system is flawed. "Physicians are also required to work a period of low-paying servitude, for which they are compensated the rest of their lives with higher pay and guaranteed employment," noted H. F. Gilbert of Baylor College of Medicine in Houston. "Unfortunately, we can't do that for postdocs."

Dresselhaus says the guide won't recommend a specific pay floor—"it would be hard to get anything through [NAS] review that was opposed by NIH or the biomedical community," she confesses—or prescribe certain practices. "But we hope people will use it as a basis for further discussion."

-JEFFREY MERVIS

Army Corps Seized by Dam Indecision

PORTLAND, OREGON—For years the Army Corps of Engineers has been chewing over the best way to bring back endangered populations of salmon and steelhead along the Snake River. The most controversial proposal —embraced by environmentalists and bitterly resisted by many local residents—is to breach four hydropower dams on the Snake River, a tributary of the Columbia River in Idaho and Washington state. At a press conference here on 17 December, the corps announced, to the dismay of both sides, that it was delaying a decision until summer.

Describing the evidence as "not conclusive," Brigadier General Carl Strock, commander of the corps's Northwestern Division, argued that the economic and social impacts of breaching the dams are so enormous that the corps needs "additional regional dialogue and scientific information" to "arrive at a preferred alternative." As a basis for this discussion, the corps has released its draft environmental impact statement: megabytes upon megabytes on everything from salmon growth rates to analyses of tribal treaties (www.nwd.usace.army.mil).

The delay does not sit well with tribes and environmental groups. Fanning their displeasure, the U.S. Fish and Wildlife Service (FWS) issued a report on the same day asserting that dam breaching "would provide many more benefits to fish and wildlife" than would other options. The "biological conclusion is a no-brainer," says FWS regional administrator Anne Badgley. "A free-flowing river is better than a dammed river."

However, the corps will turn first for advice not to FWS, but to another agency the National Marine Fisheries Service (NMFS)—which under the Endangered Species Act has the legal mandate to protect endangered migratory fish throughout the

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Columbia River Basin. Unsatisfied by the prospect of planning tributary by tributary, the NMFS wants to incorporate the recovery of Snake River fish into a basinwide effort. For that reason, says NMFS regional administrator Will Stelle, the agency is examining a "much more complicated" subject than Snake dams versus no Snake dams: the effects on endangered fish throughout the region of habitat degradation, hatcheries, and fishing, in addition to hydropower.

The examination is occurring through a broad new NMFS program called the Cumulative Risk Initiative. CRI—which attempts to integrate the factors determining the species' risk of extinction into a model of population growth—supersedes an effort known as the Plan for Analyzing and Testing Hypotheses, or PATH (*Science*, 23 April, p. 574). PATH was intended to be the sole scientific basis for a Snake River decision, until NMFS concluded that independent scientists would get lost in PATH's complexity.

Using the more transparent CRI model, Stelle says, NMFS scientists have finished an analysis of improvements that might help the Snake River salmon recover. The next step, he says, is to rate each option's feasibility. If what's best for the salmon were the sole criterion for decision-making, Stelle ad-



Breach of faith? Army Corps has yet to rule on fate of this Snake River dam.

mits, "we should stop all irrigation, terminate all development and inriver uses, take out the dams, and probably move east." But economic and social factors—not just what's best for the salmon—must be considered, NMFS recognizes.

Next summer, after the CRI is finished, the corps will identify its "preferred alternative" in a revised draft environmental statement. The final version is expected late in 2000. If the corps endorses dam breaching, the matter will go to Congress for a final decision suggesting that the resolution on the fate of these controversial fish is a long way off.

-CHARLES C. MANN AND MARK L. PLUMMER Mann and Plummer are the authors of *Noah's Choice*.

ScienceSc⊕pe

Science Under Siege When security outfits in three former Soviet countries stepped up their activities in 1999, scientists paid the price. The Cold War games kicked into high gear last July, when Russian ecologist Vladimir Soyfer was accused of mishandling classified documents on nuclear contamination. The Ukrainian KGB charged marine biologist Sergey Piontkovski with diverting Western grant money to foreign accounts. And Belarus got in on the act, reportedly imprisoning a researcher who studies lands blighted by Chernobyl. No matter the outcome of these cases, there's no sign that the attack dogs will be under tighter leash in 2000.

Getting Out the Vote Cutting-edge science promises to be a 2000 election issue—but not in the way many might hope. Antiabortion groups have put a high priority on banning taxpayer funding of promising research using cells and tissues from human fetuses. The Traditional Values Coalition is already running TV ads attacking four senators, including Nebraska's Bob Kerrey (D), for voting against an amendment that would have required scientists to document the source of fetal tissues. Meanwhile, biomedical lobbyists are girding themselves for a bruising congressional debate this spring over legislation that would ban or restrict federal support for fetal tissue studies.

E-Publish or Perish? Web-based scientific publishing will see some major roll-outs this year, as NIH test drives its controversial PubMed Central biomedical journal database and several players develop more preprint sites for posting papers that haven't yet been exposed to a peer reviewer's red pen. And expect universities and research societies to step up their assaults on for-profit journals, founding more low-priced competitors.

Genomaniacs Researchers racing through a trio of high-profile genome sequencing efforts are likely to see some checkered flags soon. First across the finish line should be a complete picture of the fruit fly genome, scheduled for release within a couple of months. But the runner-up will get much more press: a rough first draft of the human genome, due by March. Plant scientists are rooting for a bronze for the humble mustard, whose genome could be sequenced by year's end. The list of organisms that have had their genetic codes cracked could grow to nearly three dozen by year's end.

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