Ethics Debate Sends Tremors Through USGS

A geologist is threatened with suspension after lending expert advice to a group trying to stop motorcycle riding in the forest

WHEN A SCIENTIST GOES TO WORK for the government, must he avoid using his expertise to help a private cause—even if he limits himself to giving advice on his own time?

This question confronted Howard Wilshire, a geologist at the U.S. Geological Survey, when, as a private citizen, he criticized another federal agency's plan to lay out a track for motorcyclists in a national forest.

Wilshire has a passionate interest in defending arid lands from the onslaught of offroad vehicles. His official and personal efforts have intertwined to make him one of the world's leading authorities on this subject. But they also brought him attention of a different sort: earlier this year, he was locked in a widely publicized battle with his boss, USGS director Dallas Peck, who tried to suspend him for misconduct.

Peck's action, which was overturned recently, grew out of what he saw as a conflict of interest. Peck said Wilshire had violated federal criminal law by advising an environmental group called FAWN (Friends Aware of Wildlife Needs) on how to prevent the Forest Service from building a playground for motorcyclists in California's El Dorado National Forest. Wilshire at one point suggested that FAWN subpoena him as a USGS expert, even though federal employees are not allowed to testify as experts against the government.

This case highlights a problem that is likely to arise again and again for scientists in public service. Because of their expertise, they may have—or believe they have—the best insight into a scientific issue that has become embroiled in public debate. But if their view happens to clash with the position taken by responsible officials, they face some difficult choices: they may keep silent, speak out at risk of punishment, or resign. The middle option is perhaps the most satisfying, but also the trickiest to negotiate, for the rules are always changing. To what degree public employees may combat the decisions of their bosses in public is a question that the Wilshire case brings into sharp focus.

Peck's attempt to punish Wilshire, combined with a directive to all staffers that they should limit involvement with environmen-

tal and other nonprofit groups, caused a storm in USGS over the summer. The directive was later withdrawn and replaced with general advice to use "sound judgment." But many scientists still look uneasily on the Wilshire case, fearing that headquarters has become too ready to sacrifice personal freedom in the interest of conformity.

"I think it's an important issue," says Brent Dalrymple, a colleague of Wilshire's in the USGS office at Menlo Park, California. He claims that taxpayers have a right to hear all manner of testimony and opinion from U.S. experts, regardless of whether it clashes with the official line. "Should the public have access only to the information that an Administration wants to release?" Dalrymple asks.

Environmental groups such as the Sierra Club also see the Wilshire case as having broad implications. They link it with other examples in which they think the government has bottled up information. These include:

■ U.S. Fish and Wildlife researchers who allegedly were not permitted to speak out on the threats to wildlife posed by irrigation runoff in California.



Wilshire. Won a partial victory.

- USGS staffers who say that risk data on the nuclear waste burial site at Yucca Mountain, Nevada, are not being presented accurately.
- A U.S. Park Service and USGS researcher whose unfavorable testimony on offshore drilling was canceled by superiors at the last moment.
- A decision by White House staffers to edit controversial testimony on global warming by a National Aeronautics and Space Administration scientist.
- An incident in the 1960s, in which Dalrymple and several other USGS staffers at Menlo Park got in trouble with an Interior Department chief for opposing as too risky a building project that was slated to go on the soft mud of San Francisco Bay. After first ordering the scientists to be quiet, the Department retreated and let them speak.

Peck, on the other hand, sees the Wilshire case narrowly, as one in which a scientist used not just his expertise but his public office to advance private ends. Peck put it as follows in a letter of reprimand to Wilshire: "Your support of FAWN could most certainly result in the loss of your independence or impartiality, resulting in damage to the reputation of the USGS as a scientific agency. . . . We risk some erosion of our organizational credibility if we place ourselves in a position where we can be easily identified not as a private citizen but as a USGS employee in an advocacy role or supporting either side of a controversial issue."

At the heart of this case is a battle between off-road vehicle (ORV) users and those who would like to steer ORVs away from public lands. This debate on where ORVs may travel has raged in California for more than a decade, and Wilshire, a mantle petrologist with a Ph.D. from the University of California at Berkeley and a 30-year veteran at USGS, has been involved from the start. He was drawn in, he says, when scientists in the Apollo program asked him to find out how long disturbances of the moon's surface would remain visible. Using the Mojave Desert as a model, he made studies in the late 1960s that led him to conclude that the scrapes and marks left by the lunar rover, for example, would last a very long time-17 million years. This raised a concern in his own mind about the "least geologically active" areas on Earth.

"This happened at a time when the use of ORVs was expanding tremendously," says Wilshire. "I was doing it myself. Whenever I wanted to go somewhere in the desert, I just drove there. But I could see the tracks left by the recreationists, and the abundance of them bothered me." He began to study the long-term effects of human activity on arid lands, eventually concluding that the use of

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Tearing up the desert. Wilshire's research led to a passion for protecting arid lands.

ORVs does irreparable harm.

Wilshire also began to speak out as a citizen against the disruption of arid ecosystems. Two years ago, Wilshire's reputation as an opponent of ORVs reached Karen Schambach, president of FAWN, a tiny activist group in the Sierra Nevadas. She was preparing to fight the U.S. Forest Service over its plan to build a network of motorcycle trails through the El Dorado Forest near her home in Georgetown, California

In 1987, at Schambach's request, Wilshire visited the El Dorado Forest on his free time and offered to serve as an expert witness on flaws in the plan for ORV trail maintenance. He pointed out that his testimony would have more impact if he were subpoenaed as a USGS official

Later, when it looked as though the case might not go to court, he wrote a letter as a private citizen poking holes in the Forest Service's environmental assessment, filing it in the public docket and sending a copy to FAWN.

It was about this time, according to Wilshire and Schambach, that the U.S. attorney handling the case for the Forest Service called Wilshire's superiors. The outraged attorney complained that Wilshire was using his USGS status to foment trouble, putting himself and the Survey in a conflict of interest. Without asking the USGS to investigate on its own, Peck took up the cudgels and many months later, in March 1989, sent a rebuke to Wilshire, threatening to suspend him for 4 weeks.

Peck's rationale had two parts, one based narrowly on the 1879 "organic act" that created the USGS and the other on general codes of conduct that apply to all federal employees. The organic act states plainly that members of USGS "shall execute no surveys or examinations for private parties."

The prohibition's meaning has never been spelled out in court, and USGS staffers have

made their own interpretations. E-an Zen, a senior scientist at USGS headquarters who became involved at Peck's request, says, "I did a little digging" through records of the National Academy of Sciences, which proposed the creation of USGS in 1878, and concluded that "there is no way one can tell why these words were put in." He thinks they may have been included in the act as boilerplate.

Wilshire contends the rule has been interpreted lately to mean that no one may write a professional study for a private business. However, the USGS has not interpreted this tradition very strictly. "We'd be violating the law every time we turn around, if that were true," says Wilshire. Properly sanctioned reports benefiting industry are issued often. Furthermore, according to Wilshire, USGS staffers are sometimes asked to visit a private site and interpret the geology.

But Peck didn't let Wilshire's visit to the El Dorado forest slide by in the same way, ruling instead that it violated the organic act. Many senior USGS scientists rose up in protest, sending a flood of outraged letters to the director, warning that he—not Wilshire—was hurting the Survey's integrity. But the director did not back off.

Wilshire appealed the decision to the Department of the Interior, USGS's bureaucratic home, and got a Solomon-like judgment. Deputy assistant secretary Charles Kay ruled in August that, while Wilshire had misbehaved, there was not enough evidence to convict. According to USGS personnel chief Maxine Millard, the Interior Department solicitor—the same one who earlier had recommended punishment of Wilshire—decided that the case would be hard to win. Peck decided not to push any further, agreeing to a rebuke rather than suspension.

Wilshire has filed a grievance anyway, asking that Kay's and Peck's letters be removed from his file, also that the Survey

make its policy crystal clear. Since his case blew open, he claims, headquarters has been sending out vague memos on what makes for a conflict of interest. Millard says that those now demanding clearer guidelines may regret it later. In her view, it's better to leave such matters to personal discretion, but, she adds, "They've raised the issue; now we have to deal with it." Consequently, USGS staffer Clifford Nelson has been asked to look into the history of rules limiting off-duty consulting and to help the agency write some definitive new guidelines.

While all this was being debated, Peck added fuel to the fire by issuing last November a directive (Administrative Digest 933 or AD 933) that seemed to prohibit a whole new raft of activities. It named the Sierra Club and the Nature Conservancy as two typical nonprofit organizations that should not be allowed to benefit privately from USGS labors. It also seemed to cut back on working-hours involvement in professional societies.

Coming at a time of low morale and tight budgets, the memo seemed to many in USGS like the final insult.

Even those with no particular interest in the Wilshire case, including many senior USGS scientists, asked Peck to reconsider his words. Peck responded by asking Zen to chair a review committee. The result was the issuance of a new ethics directive (AD 1009) dated 31 July. It claimed to "amend" the offensive sections of AD 933, making the prohibitions more general and appealing to scientists to use "common sense" and "sound judgment" in balancing the desire to speak out as citizens against the need to protect the credibility of USGS.

As for the question of whether Wilshire himself got fair treatment, opinion remains divided. Many senior staffers think the final result was acceptable. For example, Jack Evernden, a USGS geophysicist who had come to Wilshire's defense earlier, says: "In my view, it came out fine. The system worked."

Others remain uneasy, however. For example, Brent Dalrymple says he is "disappointed." Because there had been no definitive interpretation of the 1879 USGS act before, Peck had an opportunity to make one and to make it generous. Instead, the decision on the Wilshire case and AD 993, according to Dalrymple, reveals bad judgment. While most of the damage has been repaired, he regrets that the USGS leadership wavered in the first place. Dalrymple says leaders of strong research institutions must tolerate some confusion and dissonance to retain good people: "That is the price you pay for hiring creative, aggressive scientists." **■** ELIOT MARSHALL