Challenges abound for two superintendents whose golf courses are located on environmentally sensitive federal parkland.

The sun ushers in a spring morning at Wawona Hotel Golf Course on the southern tip of the Yosemite National Park in Wawona, Calif. Although the ground is saturated from the previous night's rain, irrigation heads are going full blast — putting out so much water on the soaked greens that the cups are turning into veritable frog jacuzzis.

But it's just another day of playing by the rules for golf course superintendent Kim Porter, who has no say in the irrigation regime on this day. Because the course is located on national parkland, Porter's guidelines are federal and not state.

That means Porter must irrigate when told. In fact, he must go through a complex process just to remove a bunker or get permission to apply pesticides.

A world away on the far reaches of Cape Cod, Mass., Stuart Eyman faces the same sort of dilemmas. As superintendent of Highland Links Golf Course, the only layout inside the confines of the National Seashore and thought to be the oldest course on Cape Cod, the federal government also controls Eyman's work life.

For the two superintendents, regulations and guidelines are at times confounding and sometimes arbitrary, usually administered by someone hundreds of miles away.

The soaked greens at Wawona, a delightful nine-hole layout that opened in 1918, serve as a perfect illustration of the alternate universe the two superintendents find themselves. The golf course is the overflow area for the effluent tanks of hotels located within the National Park. So when the tanks are full, Wawona is watered whether it needs it or not per order of the parks department.

Porter combats the excessive water use with an aggressive aeration program, plugging his greens three times a year and putting on ample amounts of topdressing.

He also does not use pesticides or fertilizers on the course. And because Porter limits irrigation during summer months, he encourages hearty varieties of turf while driving out weaker ones and holding off disease. Few weeds survive.

Porter last applied for pesticide-use permits in 1981 during his first year as superintendent and was turned down. Since that time, and with the backing of current owners Delaware North Corp., the company that runs the hotel and course, he has maintained the place sans...
pesticides but with plenty of ingenuity. The health of the turf, including what he calls a mutant strain of bermudagrass on some tees, and the lack of weeds are a testament to the success of his program as it is to his patience.

"It's all done culturally," says Porter, who graduated in 1977 from Fresno State University with a degree in plant science and soil fertility.

For instance, Porter is not allowed to trap varmints that might tear up turf, but that does not stop him from pursuing them — indirectly. "We're very friendly to birds of prey that go after gophers," he says, noting that hawks are his pals.

Porter removes cutworms from greens by flooding the putting surfaces, which drives the pests to the surface where they turn into meals for the abundant bird population found inside the park.

"Or you can step on them," he adds.

He notes the effluent is not all bad and in fact helps combat clover. The practice putting green located across the street from the course and just outside the door of the pro shop is rife with clover, Porter says, because it is irrigated with potable water.

The guidelines are not just about chemicals. Nearly every spring the annual snowmelt causes a spring to pop up near the ninth green, sending a stream of water over the putting surface and making it impossible to mow, never mind putt on. Nearly half the putting surface is out of play for a good portion of the season.

Porter is forbidden by regulations from installing any permanent drainage anywhere on the course. The best he can do is carve temporary shallow trenches to move the water away from in-play areas and off the course.

Even restoring the land can be challenging. A few years ago, on the recommendation of the United States Golf Association, Porter wanted to remove a fairway bunker located near a small stream. By converting the area to rough, players would avoid having to hit long

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Because of federal restrictions, Highland Links Golf Course Superintendent Stuart Eyman can only irrigate his tees and greens. He holds off disease by keeping his heights of cut slightly higher than most courses.
As the superintendent of a course located inside Yosemite National Park, Kim Porter hasn't used pesticides since 1981.

"We had to get triple-X clearance" to remove a fairway bunker.

KIM PORTER
SUPERINTENDENT, WAWONA (CALIF.) HOTEL GOLF COURSE

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sand shots over a hazard. It was months before he received permission to fill in the small area. Porter first applied to make the change to the parks office in San Francisco. The request was then kicked up the ladder to the Denver office where the decision was eventually made.

"We had to get triple-X clearance to get that done," Porter says.

Because the golf course land is considered to be a pristine archeological site with possible Native American artifacts buried beneath the turf, any digging or filling-in is tightly monitored. Even the removal of trees more than 6 inches in diameter — ponderosa pine, oak, fir and cedar — must be classified as a danger to be taken down. Otherwise they stay, even if the shade or root structure seriously harms turf growth. Porter says he counts on heavy winter snow to do some of the pruning for him.

Out on Cape Cod in the town of Truro where the Pilgrims first landed before moving on to Plymouth, Eyman has his own hoops to leap through. Highland is a nine-hole layout thought to have opened in 1892, making it one of the oldest golf courses in the country. Originally part of the Highland Resort, the eighth green is located just a few yards from the resort's Highland House, which now houses the Truro Historical Society.

Behind the seventh green is Cape Cod Light. The original was built in 1792 and sat some 450 feet closer to the ocean, but the lighthouse was relocated closer to the course in 1996, away from the eroding bluffs. The National Seashore, part of the U.S. Parks Department, came to be in 1962 at the urging of President John F. Kennedy. Since 2001, Cape Cod native Eyman has been the superintendent working for the town of Truro, which is the concessionaire and leases the course from the federal government, but plays by federal rules.

Part of Eyman's job is to submit a list of pesticides and fertilizers he wishes to use on the course annually.

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Check out these other "green" stories:

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- In his Designs on Golf column on page 26, Geoff Shackelford advises the golf world to embrace nature.

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"Even if it's approved one year, there's no guarantee it will be the next," he says. "I don't know why. They never tell me."

In 2004 Eyman was allowed to use a popular insecticide to combat grubs. He applied for use again this year and by June, when the window for ridding the course of grubs was closed, he still had not heard.

"You do what you can with what you have," he says.

In another instance that left Eyman baffled, he was allowed to use a name-brand fungicide. But when the product went to generic labels, he was not given clearance to use those products but could continue to use the name brand.

Although frustrated by the process, Eyman understands the motive.

"I realize the park has its job to do, which is protecting its assets," says Eyman, a graduate of the University of Massachusetts-Amherst. "So I may not agree with its decisions concerning what I can and cannot use, but I will always abide by those decisions and do the best job I know how to do."

Part of Eyman's cultural practice in holding off disease is keeping his heights of cut slightly higher than most courses. His course's greens are mowed at eleven-sixty-fourths of an inch, fairways at seven-eighths of an inch and the rough at 3 inches. Only tees and greens are irrigated, and irrigation is kept to a minimum over the links-like design.

At Wawona, Porter does the same. Greens are mowed at slightly more than a half-inch during hot months and slightly under in cooler periods. Fairways and tees are mowed at just under nine-sixteenths of an inch.

Incidentally, Porter deals with other problems that few other superintendents face, and these have nothing to do with government regulation.

There is an abundance of mule deer on the property and they have a tendency to gouge the greens with their hooves. Mountain lions and coyotes are the best defense against that problem.

For some reason, bears have taken a liking to one particular putting surface.

"They like to use No. 6 green as a toilet," Porter says. "Whoever mows that green in the morning takes a shovel with him."

One of the course's workers says coyotes have their favorite spots as well. Valve boxes are often their rest stop of choice — without approval of the parks department.

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