

Best site, ecologically and financially, equals best results for bank

By MARK LESLIE

Experts have learned much in recent years about constructing wetlands, yet the site can still "make or break you," they say.

"The Corps [of Engineers] in the Norfolk, Va., district cites a cost of \$20,000 an acre to create wetlands," said Williamsburg Environmental Group Vice President Mike Kelly of Williamsburg, Va. "But it's very site-specific. If you have a wrong site it could cost \$50,000 to \$100,000. And if you pick the right site — say, prior converted cropland field — you can create wetlands for \$3,000 to \$5,000 per acre."

Positive attributes include hydrology, plant species and soil conditions, Kelly said.

"What it comes down to," said former Environmental Protection Agency controller Dave Ryan of Reston, Va., "is, you have to look at demand, the regulatory agencies you're dealing with, and the science: What do you have to do to make a property a workable wetland."

"The site could make or break you — that and the economics of property in the area."

Mike Horton, of the California Department of Fish and Wildlife, said construction of vernal pools are particularly tricky, and important, since so many have been lost to development over the years. Vernal pools are very delicate, specific wetland ecosystems.

"We're particularly looking at acquisition banks ... because we recently have some vernal pool species listed [as endangered]," Horton said. "One of the biggest problems we have is that it is unclear whether created vernal pools will actually function in the long term. Most have taken a million years to develop. The oldest we've created are 5 to 8 years old. Some are failing and some are not. But we don't know if they are going to survive another 10, 20 years or 1,000 years."

Saying the difference between survival and failure of these vernal pools usually is in "methodology of construction," he added: "We've learned a lot in how to construct them over the last five years."

Yet Steve Johnson, director of conservation science for the Nature Conservancy's regional office in San Francisco, said: "The soil structures, underlying substrate and ecosystems [of a vernal pool] take eons of time to evolve and are incredibly complex. And to think they are reclaimable with a couple of deft strokes of the bulldozer is naive."

...

Meanwhile, rather than regarding wetlands as anathema, golf course architects are, in many cases, using wetlands to their advantage.

Lisa Maki is looking forward to designing Eagles Nest in Sacramento, Calif., on a site where developers must mitigate for the fairy shrimp.

"Use it [wetlands] to your advantage," said course designer Bobby Weed. "Normally, you can incorporate wetlands into the course features and out-of-play areas. They can become aesthetic and even part of the filtering system as well as become quality buffer areas."

"That's where the creativity and imaginative skills of golf course architects should lie, in trying to be of more assistance to the developers and working with the engineers to develop some of those areas."

GOLF COURSE NEWS



The Champions Club of Summerville in Stuart, Fla., has taken dramatic steps to preserve its wetlands. See related story, page 70.

Environmentalists concerned about ease of approvals

By MARK LESLIE

Some environmentalists are concerned that the mere existence of wetland banks will oil the gears of the permitting process, while others give tepid support and still others see them as a great improvement.

"There is some concern that we will make it too easy," acknowledged Mike Horton, who authored a mitigation bank policy for northern California for the state Department of Fish and Wildlife. "The initial response from some groups has been fairly negative. However, the groups that have been willing to work with us on this have started to see its potential."

"Certainly one of the benefits from the regulatory end is, it does provide a faster review of mitigation options," said Herald Jones, chief of the Southern Virginia Regulatory Section of the Army Corps of Engineers' Norfolk District. "But because a bank is in place, that does not vacate the requirements of sequential approach of avoidance, minimization and, finally, compensatory mitigation. Those are federal regulatory requirements [under Section 404] that must be fulfilled."

Steve Johnson, director of conservation science for Nature Conservancy's San Francisco office, warned of dangers with creation banks while supporting "restoration" of former wetland areas.

"Mitigation is absolutely necessary as a way to manage the impacts of life in the modern world," said Johnson, whose group has performed numerous mitigation transactions and has contracted with the Army Corps of Engineers to identify, acquire and restore sites along the Sacramento River. "But creation of habitat as a mitigation strategy is very dependent on the ecosystem that is being impacted. Sometimes it's possible and sometimes it's probably not. Mitigation strategies need to acknowledge that not all ecosystems are created equal."

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Feds vs states: Who will be in charge

As would-be wetland bank operators wait for government agencies to pass regulations controlling the fledgling business, their anxiety rises. A major concern is any future difference between federal and state rules.

Normally, the federal government sets the standard and state regulations must at least meet that standard. "But states can crank down and make it more difficult. Depending on how it is done, it could cause a lot of tension," said Dave Ryan of Reston, Va., a consultant who worked for the EPA for 17 years.

Whereas individuals desiring to create banks normally can't afford to push ahead until they know exactly what regulations to follow, bigger entities can, he said.

For utility companies creating banks — such as Florida Light and Power Co., which hopes to construct a 1,500-acre bank — most of the cost of establishing a mitigation bank is going to be recouped in their rate-fee structure, Ryan said. "For them, the costs are not

a problem to set off and start going. They can absorb [the cost of] any necessary changes in the future. But a private entrepreneur or small operation can't do that."

"Everyone is waiting for those regulations to come out. And that delay is queuing people up. Who will rule, the feds or the states?"

The Army Corps of Engineers' Herald Jones, who is involved on a national task force to draft the regulations and who helped draft a wetlands bank agreement for the city of Virginia Beach, Va., said some rules are certain.

"We will initially look at all opportunities for on-site mitigation," Jones said. "If that is not possible, we would go to nearby or adjacent properties. In-system [in that particular watershed] mitigation would be the next level down. If opportunities are not available or not practical, we would look at out-of-system mitigation."

"Frankly, that sequence of events ... must be completely fulfilled before going to a mitigation bank."

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Mackenzie mystery unraveled

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looking for "the lost manuscript" that Dr. Mac had written before his death in 1934. It was titled "The Spirit of St. Andrews" and Whitten had faith that the manuscript still existed. He asked the owner of the house if it could be in storage. The owner was persistent that he had looked tooth and nail to no avail. It was *not* in the house.

In 1993 Haddock entered the picture. An avid but average golfer, he began his quest to

play on courses such as ones designed by his famous step-grandfather. (Dr. Mackenzie had no natural children.) He telephoned Cypress Point head pro Jim Langley, who arranged for him to play the famous layout. Wanting to show his gratitude, Haddock said, "Before my father died, he had given me some folders with papers he had saved from that time when I was a boy living at Dr. Mackenzie's home." Haddock explained he had kept them even when the

family was traveling back and forth across the country in a very small house trailer. "I had always thought they were articles about camouflage which Dr. Mac had written after his participation in the Boer War," Haddock said.

He said his wife had stashed these precious folders in a cedar chest a few years before. As they sat on the floor going through the folders, they found the camouflage manuscript. But then they found a sketch of a golf hole, then another, and at the bottom were three worn binders containing seven chapters of a book titled "The Spirit of St.

Andrews." The three folders contained: the original hand-written text, with a forward written by Robert Tyre "Bobby" Jones Jr.; and an interim edited version of the original manuscript; and a carbon copy of the original typed finished typeset.

Off the Haddocks went to Pebble Beach, where they spent an evening with Langley and Dr. Barry Staley, executive director of the recently formed Mackenzie Society. "I opened my bulging briefcase and began laying some of the items on the large conference table," Haddock said with a chuckle. "As

my hosts watched over my shoulder, gasps could be heard when I first brought out a sketch of one of the holes at Augusta National and then the three binders.

"I am having the manuscript published just as Dr. Mackenzie wrote it, so golf enthusiasts can read about not only the principles of the golf swing, or what constitutes a good golf hole, but to learn more about a man who knew or worked with Bobby Jones, Gene Sarazan, Robert Trent Jones Sr., Marian Hollings, Max Baer and others of the 1920s and early '30s, and whose social circles included

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Concerns of approval

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"For some [projects], the best mitigation strategy is to ensure that areas are set aside and permanently protected as compensation for a 'take.' That seems to be the only workable strategy because it's not possible to recreate to the lost ecology values."

While the failure of smaller created wetlands is often blamed on a lack of monitoring at the site, Johnson said: "Another equally valid point of view is that it's devilishly hard to create certain habitat types. The failures are blamed on the implementers, but sometimes the basic concept is flawed. Creation of habitat types that have formed over geologic time, and trying to recreate them with a bulldozer and a few gallons of water is scientifically questionable."

Saying that a creation bank mitigation strategy needs to evolve, he added that it "should focus on preservation of existing sites and enhancement of their management, as opposed to creation."

Interestingly, except for the Nature Conservancy, environmental groups have been mum about constructing wetland banks themselves.

"No environmental groups have approached me about being a bank sponsor," Jones said. "Perhaps that's strange. I think it would be a very worthwhile endeavor for them. Quite frankly, they could augment their existing resources and provide a source of income, plus enhance the environmental quality of their larger tracts [of land] — basically through the restoration of prior converted croplands, or previously filled wetland areas."

"Their [Nature Conservancy's] advantage is that they are non-profit, and that makes it more affordable for the developer," Horton said.

Most of the people in the Environmental Protection Agency (EPA) "think the environmentalists don't understand mitigation banking," said Dave Ryan, former EPA controller. "It's change, and change is potentially frightening to them."

"There is a downside. A mitigation bank could go belly-up. But there are ways to safeguard the wetlands."

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