

# WATER IS NO HAZARD-ALMOST



AFTER



BEFORE

Do men play golf on a river bottom? Hardly; at least not unless your name is Novel B. James and you live in land-hungry Southern California

by PENELOPE HARRELL

Several years ago Novel B. James leased a solid waste dump from the City of Santa Ana in Southern California. On it he built a modest nine-hole course. When River View GC quickly grew to within 10 per cent of its saturation point, the owner looked around for room to expand. The only available open space adjacent to the course was the summer dry bed of the Santa Ana River—not exactly a choice location.

James took the chance, however, ignoring those who questioned his action. Today he presides over a unique 18-hole, par 70 course, which challenges skilled golfers and supplements the county's coffers.

The feasibility of this imaginative location was substantiated when James consulted the Army Corps of Engineers, the Orange County Flood Control District and the Orange County Board of Supervisors.

The county readily leased the non-revenue producing riverbed acreage until the year 2011 for a minimum of \$2,400 a year plus a percentage of profits. It also assesses taxes on this property.

The Flood Control District placed one restriction upon the course design: A 300-foot wide water bottom must be preserved. Thus, no tree or shrub can be planted closer than

150 feet to the center line and elevated greens must not interfere with the water flow.

A hydraulics engineer advised grading a 60-foot wide channel through the center of the riverbed, digging the channel one foot lower than the natural bottom. This channel should sufficiently handle all but the very worst flooding.

Rainfall in this area is expected between October and March 15 annually. Based on previous precipitation statistics, it is predicted the course will be unplayable for not more than six weeks a season. During this time, however, golfers play the nine holes not located in the riverbed. As the water line drops after a rain, 12 bridges across the river permit play on the additional nine to resume at the earliest time.

Management is undaunted by the threat of a 35-year flood cycle. They say that the moderate flooding in 1969, which destroyed backyards and swimming pools on a tributary a half mile away, would have left their elevated greens unscathed. And, they anticipate, the bermudagrass on the fairways will prove to be an effective erosion deterrent.

The sandy riverbed proved ideal for golf course construction. Rock removal was all but unnecessary,

and the sandy soil provides such excellent drainage that salt accumulation is non-existent. With generous irrigation and fertilization, the bermuda fairways and bent greens thrive. The superintendent feels that the riverbed turf, once established, is much easier to maintain than the turf on the original nine holes.

The anticipated problem with silt has been handled by planting 1,000 linear feet of pasture grass upstream to filter out any sediment, which might otherwise wash onto the course.

Out of necessity, all sand traps are placed on the elevated greens. During construction, it was noted that the bare earth utility roads absorbed much more moisture than the abutting turf and when they were subjected to even the slightest water flow, the moisture caused the adjacent grass to peel back.

Now, if the creek doesn't rise, River View GC should turn a profit on the \$250,000 investment within three years. Who knows, by then James may have a plan to turn the neighborhood lemonade stand into a restaurant-cocktail lounge to complement his log cabin clubhouse. □

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