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Come on in . . . the Water's Fine

By Lee Pilgrim, Editor, Texas Water Resources
Almost 35 million Americans went fishing in 1975. Another 12,100,000 went water skiing; and 4,050,000, skin and scuba diving.

These figures appeared in the January issue of The Boating Industry, which also reported that 48,700,000 people participated in recreational boating aboard one of the 9,740,000 pleasure boats that plied U.S. waters.

Since Texas has more surface water than any other state except Alaska, plus 624 miles of meandering Gulf shoreline, it is reasonable to conclude that a large chunk of the U.S. water recreation took place on Texas waterways.

Forty years ago the water-based recreation concept in Texas was as remote as SSTs and coed dormitories. Stockponds with crude diving platforms served rural swimmers. City swimmers had a crowded pool in the park. Lakes and rivers were for everyone--used mostly for fishing. The seashore offered pleasures that only a few could enjoy.

Depression and wars behind them, Americans with increased leisure turned to water for fun. A Texas Parks and Wildlife Department study reports that 43 percent of all outdoor recreation during 1968- 70 occurred on or beside the state's water ways. Swimming was the number one out door recreation, and fishing was in the top five. Since 1970 there has been a strong upward trend. One survey predicts 72 percent more swimmers by 1980 than in 1965, even though the estimated population increase will be only 29 percent. An index to the growth of other water recreation in the United States is retail sales for 1973-4: boats, motors, and accessories rose 10 percent; fishing tackle, 15 percent; and skin diving and scuba gear, 20 percent. Retail sales in 1974 reached an estimated $3,012,000,000.

To accommodate this ever-growing population of water sports enthusiasts, Texas has many lakes or reservoirs, miles of rivers and streams, plus ponds and tanks, pools, inland bays and waterways, and the Gulf.

Rivers and Streams

Rivers and streams in Texas total 80,000 miles. As unique as the Texas landscape through which they flow, the rivers have retained much of their natural character even where development exists. Although these rivers are well-known to Texas fishermen, boaters, swimmers, campers, and canoeists, the demand for recreation on rivers and streams often remains unsatisfied for reasons pointed out in Texas Outdoor Recreation Plan prepared by the Texas Parks and Wildlife Department (TPWD). Access is limited, and waterways have not been developed for ready use; landowners feel that their adjoining property will be jeopardized by large numbers of boaters; conflicts arise between landowners and recreationists over the definition of a public waterway.

The TPWD plan points out the need for effective planning and legislation to increase the use of Texas waterways and to maintain quality recreation, yet protect the property rights of landowners. Ron Josselet of the Waterways Section (TPWD), speaking at the 8th Recreation Management Institute at Texas A&M University in March, discussed the agency's cooperative waterway concept. Involving individuals, recreation agencies, and water resource entities, the concept includes 1) retention of riparian land in private ownership, 2) provision of public use areas, and 3) an education program focusing on proper stewardship of the resource.

Another area of concern involving rivers is the impact of large numbers of users on the river and its banks. Data for a management plan for the Rio Grande in Big Bend National Park is being compiled by Robert B. Ditton and David J. Schmidly of A&M's Texas Agricultural Experiment Station. Ditton is an associate professor, Recreation and Parks; Schmidly is an associate professor, Wildlife and Fisheries Sciences. The research team is studying the year-round use pattern to get a baseline for predictions and management.

"We never really have looked at the impact that large numbers of users have on natural resources," Ditton pointed out, "and we need to consider the environmental impact of recreation since the resource is being subjected to more and more use. At present the resources seem to be absorbing the crowds, but what are the environmental costs? If too great, we will need to find ways to develop more resources."

After identifying human use problems and looking at strategies for dealing with the impacts on the Rio Grande, the A&M team will lay out alternatives to make sure the national park values are not lost by overuse, Ditton said.

"Our work has a lot of implications for other Texas waterways. Impact of recreation use is important whether it is state or privately-owned recreation. More studies like this will be done in the future," said Ditton, recreation representative on the Texas Water Resources Institute Planning Committee.

Lakes and Reservoirs

Although there are no natural lakes in Texas the state has 157 major reservoirs (5,000 acre feet or more). Forty-five have been created since 1960, and another 66 new ones are expected to be completed by 2020. Surface area of public reservoirs is approaching 2 million acres, and the total shoreline is estimated to be about 17,500 miles-- containing more than enough water to inundate and area larger than Delaware, Rhode Island, and the District of Columbia combines.

Frank W. Suggitt, professor in the Recreation and Parks Department at Texas A&M University, says reservoirs have helped convert Texas into a water recreation area.

"Reservoirs and recreation," he says, "are helping to reshape the landscape, people's life styles, and the state's economy. Recreational use is a fortunate by-product of the reservoirs' prime purposes such as hydroelectric power or water supply. Most reservoirs are located near areas of greatest population, and that compounds the recreational usage."

Suggitt says most recreation users and purchasers of property in the vicinity are Texans, although the "draw" includes much of the Midwest and travelers on the southern route from coast to coast. Outstanding fishing success at Toledo Bend, for example, attracts people from all parts of the U.S. and Canada. Boaters also find marina facilities readily available on Texas reservoirs. There are at least 350 qualified marinas on the state's lakes, and operators work together toward common aims through the Marina Association of Texas.

Vacationers may wonder why some Texas lakes have no shoreline development--cottages, homes, resort facilities--and others do. If the reservoir is a U.S. Corps of Engineers project, the government owns the land in fee simple around the reservoir right down to the water's edge. Access roads and recreation sites are established by the Corps, which also leases to concessions. Whereas, a lake constructed by a river authority is usually surrounded by privately owned property, on which the owner may build a cottage or put up a boat dock almost at will. The river authority buys a flowage easement around the lake, but it does not own the land. Since all the land in the area is privately owned, an explosion of real estate development in the lake region has occurred.

Suggitt is concerned with this trend because it generally decreases the area's potential for public recreation. Facilities for camping, recreation vehicles, and boat launching generally are insufficient, having lost out to residential development. He feels there should be legislation to give orderly guidance to a reasonable mix of private and public lakeside development. Lacking such guidance, there is a proliferation of "ill-defined subdivisions, lack of sanitary sewers, lack of decent roads, lack of public access, and just plain urban sprawl that become costs to society."

If new reservoirs are to make maximum contribution, Suggitt sees the need for legislation to provide 1) planning and zoning to assure desirable use of resources; 2) basin-wide flood plain zoning to include reservation for public recreation sites; 3) revolving funds for advance acquisition of future reservoirs and related public recreation sites; 4) advance

acquisition of easements to land bordering future reservoirs; and 5) revolving funds to establish water supply and waste disposal systems.

A few communities, he said, recognize the need to plan properly for the most efficient and economic use of their new reservoir resources. For example, a nonprofit corporation representing the four counties bordering Lake Livingston (The Four County Development Association) adopted a comprehensive planning and development program, organized and financed locally, to set aside a peninsula at the north end of the lake for recreation.

"Money," says Fred Blumberg, assistant operations manager and recreation planner of the Guadalupe-Blanco River Authority, "is the basic cause for limited recreational development on river authority reservoirs." The cost of buying peripheral land makes recreational facilities unfeasible. The cost would have to be included in the water rate paid by the city, industry, or irrigation since most river authorities have no taxing function. Therefore minimal land is purchased for public access. He cited an example of an 21,000 acre lake with less than one acre of land for public access and recreation.

But river authorities have begun to assume a role in state recreation development. Terry Colgna, recreation resources planner for the Lower Colorado River Authority (LCRA), told the Recreation Management Institute that a law passed in 1971 "put the river authorities in the recreation business." He said the TPWD expects river authorities to play a greater role than any other state agency, except the county, in supplying rural recreation.

According to Colgan, the LCRA, in cooperation with the Recreation and Parks Department of TAMU, is now developing a master plan for a recreation program for its 16,000 acres along the Lower Colorado and its tributaries. The plan stresses coordination with TPWD, Bureau of Reclamation, Texas Historical Commission, councils of government in areas involved, n d"anybody interested in coordinating with us."

Coastal Recreation

Ditton names three approaches to studying the coastal water recreation activities--swimming, boating, fishing, skin and scuba diving. They are behavior, business and industry, and policy studies. Currently he is conducting a study of boating *behavior* on Galveston Bay, asking "Who and what number of people sail?" "What is the pattern of participation?" "How far out do they go?" "What is the total boating picture?"

The *business study* investigates the feasibility and problems involved and the economic impact. For example, there is the question of insufficient coastal marinas. Ditton says there have been no new coastal marinas in eight years. There are long waiting lists for occupancy of the 6,000 boat slips, yet the economic return to the operator must increase before more are built. The slip rental rate in Texas is among the cheapest in the United States.

Policy study takes into consideration such questions as how motor fuel tax revenues are calculated and how the state of Texas allocates funds generated by water-based recreation.

Ditton's and other studies are underway to help sole some of the coastal recreation problems, such as, access to the beach, access to water, marina shortage, and need to increase offshore fish habitats to improve offshore fishing.

Even though Texas now has an open beach law, the problem is how to get to beaches through the adjacent private property.

Though accessibility to water is generally considered a problem, Ditton says it is becoming big business with a tremendous economic impact. For example, deep sea fishing enthusiasts today can be accommodated by seven large party boats in Galveston. The total gross revenue to the operators i $212,000 accompanied by $1.3 million in associated spending by the 38,000 sport fishermen, and that leads to an estimated impact of $5.3 million, Ditton reports.

The Texas Coastal and Marine Council is helping remedy the problem of offshore fish habitats. It acquired 12 surplus Liberty ships which are being sunk in four locations in the Gulf to serve as artificial reefs. The superstructures have been cut down to prevent obstruction to shipping. They have been anchored over existing bottom obstructions in deference to shrimpers, preventing double jeopardy to their nets. Projects are finished at South Padre and Port Aransas and about one- third finished at Port O'Connor. The fourth site is Freeport.

The Council is currently involved in another issue that may be a boon to Gulf Coast vacationers. Senator A.R. Schwartz, chairman of the Council, seeks a joint federal-state project which would permit a portion of Matagorda Island, now being considered as a federal wildlife refuge, to be used as a beach facility.

Necessary Action

The TPWD Outdoor Recreation Plan includes the following water- related actions to be undertaken by the State in order to alleviate needs identified in the study and to provide optimal recreation opportunities:

1) Seek increased annual funding levels for the State Buoy and Markers and Boat Ramp Programs. Accessibility to surface water was pointed out as a major problem throughout the course of the Plan update. Increased levels of boating activity projected will mean that boating safety and access will become more critical.

2) Seek increased annual funding to allow additional local government participation in the State Beach Cleaning Program. Improved transportation routes and access to the Gulf Coast have increased the already heavy outdoor recreation participation on gulf beaches

and waters. Expansion of this program will allow local governments to better manage their valuable recreation resource.

3) Continue provision of fish for stocking streams, lakes and ponds to meet increasing demand.

4) Encourage establishment of statewide system of wild, scenic, and recreational waterways.

5) Continue efforts to provide improved fishing opportunities in coastal areas through artificial reef construction and improved fish habitats.

6) Continue to enforce and regulate existing laws and regulations pertaining to water and air quality in the coastal regions.

. . . And The Future?

What prophet 50 years ago would have dared predict that in 1976 vast amounts of money and time would be spent to provide clean water for swimmers, safe areas for boating and skiing, pleasant shores for picnics, and artificial fish habitats for fishermen? And what economics seer would have forecast the dollar flow associated with water sports today?

Recreation planners marvel at the evolution of water-based recreation, but they also keep in mind the fickle nature of sports lovers and the broad spectrum of activities labeled "recreation." As they plan, they are aware that today's scuba diver may be tomorrow's spelunker--or that a now unknown pursuit (like snorkeling 40 years ago) may preempt the interests of whimsical pleasure seekers.

However, since Texas water fun seems to be attracting more and more users each year, future fads in recreation do not pose a serious threat to Texas water-based recreation. And the trend toward greater involvement by river authorities, local government, and the general public in providing adequate facilities seems clearly justified.