URBAN RIVERS AS RECREATION RESOURCES

Clare A. Gunn, Professor
Recreation and Parks Department
Texas A&M University, College Station, Texas

ABSTRACT.---Cites examples of current recreational developments of urban waterways: San Antonio River Walk, Wichita River Parkway, Trent-Severn-Rideau Waterway (Ontario) and New York State Canal Recreation Development Program. Documents benefits: protection of natural amenities, revitalization of downtown, provision of leisure activity, and increases in jobs, incomes, and taxes generated through commercial enterprises related to development.

URBAN RIVERS AS RECREATION RESOURCES

Recent emphasis upon wild and scenic rivers tends to overlook an equally important segment of recreational resource—the urban river. While there is much merit in programs to save the more fragile and primitive river landscapes, the recreational opportunities of urban rivers seem even more abundant. Fortunately, in America today, many urban river landscapes are experiencing a renaissance of conservation and development interest. Study of these trends shows that recreational potential is high but each city demands special study and planning.

The great potential of urban rivers comes from their ability to serve so many millions of people. Both social and economic gains are abundant whenever the rich resource assets of urban river corridors are redirected from waste containers and carriers to places of beauty, repose, and of great recreational utility. It is significant that the National Park Service, custodian of the prime natural wonders of the country, should state that "There is no doubt that a thriving recreation industry could be developed on most rivers of the United States, and such development would be most appropriate, not to say profitable, at places where the river runs through heavily populated areas" (Sudia [n.d.]).

RIBBON AND NODE TYPES

From a planning and development point of view, urban river recreation seems generally to be of two types—ribbon and node. The ribbon type treats a waterway as a parkway by providing an esthetically pleasing setting for distances along the watercourse. The node type provides a concentrated land-water interface at one location. Both are excellent demonstrations of waterway renewal in an urban setting.

The node type is well illustrated by the San Antonio River Walk (fig. 1). This four-by-six-block inner city complex is a concentrated mix of park and entertainment functions in a beautiful naturalistic setting. The park, points of interest, and business elements are intricately intertwined, forming a new amalgam. This amalgam has characteristics of each element but also is a unified whole with identity all its own.

A landscape analysis of the River Walk indicated that it could be divided into four environmentally cohesive but discrete areas (Gunn et al. 1972) (fig. 2). Area "A" contains landscaped walkways along the river but no shops. It offers open space and footpath linkage between the core and upper San Antonio. Area "B" is functionally
Figure 1.—The San Antonio River Walk is an excellent demonstration of a node type of urban river recreational development.

more of a destination area in a semi-tropical setting, flanked by a few hotels, a library and a hospital. Area "C" offers a pleasant landscape setting and features many shops, restaurants, hotels and places of entertainment. Area "D" is entirely man-made, excavated in 1968 to link the natural horseshoe bend of the river to a new civic center complex of theater, exhibition building, and arena.

Survey of both visitors and voters of San Antonio proved the River Walk to be a popular as well as a popularly-supported civic feature. The voters are extremely proud of it and express no concern over the fact that over 74 percent of the visitors are from out of town. They know the River Walk as "a great thing". "We take all our visitors to the River." "I love it; I go as often as possible." "...appreciate just knowing it's there" (Gunn et al. 1972).

The visitors, which reflect a very broad range of ethnic, age and income characteristics, like it because of: "trees, quiet, nature; feel more at home than anywhere else;" "lots of good views, pleasant to walk along, peaceful, no cares, fact
that there is a river. "Clean, green atmosphere; helps relax—like a vacation spot in the middle of town" (Gunn et al. 1972).

Although the River Walk has had both lay and professional design inputs, it is not the result of one single plan at one time. Perhaps this is in its favor. It has avoided a narrow, single-purpose and sterile atmosphere that sometimes results from singular planning effort. Local citizen groups, governmental offices, architects, landscape architects and engineers have made valuable input from time to time. One visitor expressed his reaction this way, "Designed in sense that keeps human proportions, not regimented; not a national park, but commercial and natural—takes into account all human activities—dining, night life, relaxing; fact is downtown but completely divorced from city; like in country" (Gunn et al. 1974).

Rather than wait for some single agency to conceive, plan, and manage this area, as many as six major organizations and agencies collaborated on River Walk planning and management. It demonstrates that it can be done, and done effectively, and, at the same time, that the integrity of each organization is retained.

The ribbon type of recreational river development may have focal points but is dominantly a linear corridor concept. The city of Wichita is pursuing this concept along the Arkansas and Little Arkansas Rivers (fig. 3).

Stimulated by urban blight in the core of the city, plans call for redevelopment of the entire corridor, from core to the countryside, both to the north and south. "To be able to hike to the country from the heart of the city brings a great recreational resource close to those whose needs are greatest." Thus was the challenge expressed in a report in 1968 (River Corridor 1968).

Contrary to the node type of urban recreational water use, the theme is one of a series of regional parks utilizing both river and riverside. This linkage between the river proper and its setting was identified early in Wichita—a part of the comprehensive plan of 1923, park concepts in 1934, and open space and park plans in 1965 by the Sedgwick County Metropolitan Area Commission (River Corridor 1968).

Rather than provide concentrated recreational destination uses, such as those of the San Antonio River Walk, the objectives here are to provide for activities dispersed
throughout the river corridor. These include: walking for pleasure, driving for pleasure, bicycling, sight-seeing, boating, nature walks, horseback riding, water skiing, and hiking. Plans for the acquisition and redevelopment of sites for these purposes are gradually being implemented.

As is true for most urban river recreation development, water stabilization is critical. Wichita implemented its plan for flood control in the early 1960's, directing flood waters around the west side of the city. Through urban renewal, strong city council leadership, and other sources, an inflatable dam has created an important reservoir. This water body offers a variety of aesthetic and recreational activities and ties the new convention center to hotels and other adjacent land uses. Aquatic festivals and other recreational uses now spark interest in downtown activities (Gunn et al. 1974).

Through strong leadership of the planning director and public support of programs to improve the water corridor throughout the city, Wichita now enjoys a major renaissance of water as a civic amenity in the everyday life of its citizens.

URBAN-RURAL SYSTEMS

Recreational waterways that include both urban and rural (not wild) settings offer a new challenge with great promise for both node and ribbon types of development. Instead of treating each segment (urban and rural) separately, there are advantages of coordinating plans. Two outstanding examples, one in Canada and one in the United States, are worthy of study.

The Trent-Severn-Rideau Waterway in Ontario (Fig. 4) extends 425 miles and utilizes old water transportation routes, originally used by Indians and fur traders (Rideau 1971, Quinte 1973). The waterway was built for commercial shipping purposes in the early 1800's to avoid Indian and American conflict in the open waters of Lakes Ontario and Erie. Therefore, both land and water recreationists now have opportunities of viewing both urban and rural landscapes and historic sites along the way.

Of special interest are the 92 locks, linking 33 lakes and 6 major rivers. Many of the locks are still hand operated, just
as they were from the beginning. At
Peterborough is the highest hydraulic lift
lock in the world. Two chambers, 33 by 140
feet, actually lift and lower the bateau in
the water a height of 65 feet to the next
level of the canal.

Of course, the greatest obstacle to
planning such a corridor is the complexity
of existing development and levels of
government. The waterway corridor has a
population of 800,000; includes 6 cities,
8 towns and 19 villages; and includes
portions of 104 municipalities, 2 regional
governments and 9 counties. The federal
government has control of the water and
lock-site lands but other public lands
remain with the Crown in the right of
Ontario. In 1969 on the Trent-Severn seg-
ment alone, there were 25,000 cottages en
route and an additional 12,000 cottages on
adjacent reservoirs. About 26,000 vessels
use these waterways for recreation purposes
today—there is no longer any commercial use.

As a result of growing interest in rec-
reational use of these old commercial ship-
ing lanes, the federal Minister of Transport
and the Ontario Minister of Tourism and In-
formation announced in 1967 that both federal
and provincial governments would jointly
study and plan for the future of this cor-
ridor. The Canada-Ontario-Rideau-Trent-
Severn (CORTS) Committee was formed and
sponsored studies resulting in two major
reports that were given wide circulation.
These reports provided basic descriptive
information about the corridor and stim-
ulated both private and governmental action.
On February 20, 1975, a CORTS signing cere-
mony launched further action, forming two
action groups to develop further work
( CORTS 1975 ). One was the CORTS Advisory
Committee composed of private citizens and
the other was the CORTS Agreement Board
providing government input.

Already, some development oriented to
the waterway, in addition to the locks and
lock sites, has taken place. The federal
government has committed $44 million to the
waterway over the 4 year period, 1975 to 1979.
In 1973, the total cost to government was
about $12.9 million. Restaurants, marinas
and parks are being added. New services—
lodging, tours, restaurants—are needed.
The regional office of Parks Canada is in-
ventorying characteristics of their lock
sites along the Rideau. Ontario is ini-
tiating a program of provincial development
policy and plan for their lands. While much
is still in the planning stage, this water-
way corridor represents a concerted regional
effort to coordinate development for objec-
tives of recreation and tourism as well as
for conservation.

The New York State Canal Recreation
Development Program represents another
element of rural-urban regional waterway
planning and development ( New York 1975 ).
The 524-mile Barge Canal route shown in
figure 5 was chosen as the first effort of
the State in establishing the Statewide
system of recreationways. As with Ontario,
these were originally constructed for com-
mercial transportation. Portions still
offer this but recreational use continues
to outstrip this function. Included are
the Erie Canal, Oswego Canal, Cayuga-Seneca
Canal and the Champlain Canal.
The planning and development of this extensive corridor is both urgent and complicated. Portions of the waterway are already overused, especially urbanized areas with a notable need for boating, camping, day-use, fishing, winter and trail activities. The Canal passes through 21 counties, two-thirds of which are highly urbanized. The population of the region was 4.27 million in 1975 and is projected to be 5.05 million by 1990.

Rather than create a new canal authority, New York has decided to plan, develop, and manage on a collaborative basis using existing agencies. The key actors are the State Department of Transportation (DOT) and the Office of Parks and Recreation (OPR). DOT manages the canal system and retains transportation as primary responsibility. It also operates and maintains those parks and trails located at lock sites. OPR has responsibility for recreation, agreeing that recreation shall not interfere with transportation functions. The agreement between DOT and OPR allows for policy changes as the planning process dictates and as experience, awareness, and usage evolve. "This flexible attitude will allow new demands and knowledge to be incorporated into the system" (New York 1975).

In addition, many other units of government and local community groups are becoming an integral part of the program: the Department of Environmental Conservation, Bureau of Outdoor Recreation, Corps of Engineers, National Wildlife Service, National Park Service, Soil Conservation Service, regional planning boards, town, village, and city planning agencies and trail and historical societies. OPR is working closely with local zoning boards and developers to create compatible land uses adjacent to lock sites and waterway parks. For example, "during the summer of 1973, six canal parks and three trails were developed by OPR in cooperation with DOT as a pilot project. The project was an overwhelming success with an attendance of over 200,000 in one season and became the basis for continuing canal development" (New York 1975).

Recommendations have been made for over 100 sites on the entire waterway. In each, comments are made on the type of recreational activity desired, the physical development needed, and the agencies who need to collaborate for development. Most of the recommendations are for swimming, camping, ice skating, horseback riding, boating, snowmobiling, motorized vehicle use, hunting and fishing, but emphasis is also placed on interpretive programs and development of historic sites and structures.

In 1975, about 174,000 people used the canal parks; another 30,000 used the old tow path trails. The State park attendants not only maintain the lock parks but also provide interesting interpretive programs for the visitors (Dyer 1976). While most of this use was at the State park lock sites, additional canal facilities are being developed by municipalities of St. Johnsville, Fulton, Montezuma, and Lockport (Guide to Outdoor Recreation 1976).

This example is also demonstrating new collaboration and cooperation on a large scale to provide new recreational opportunities from urban and rural waters at the
same time they are given greater conservation and protective measures.

REDEVELOPMENT PROBLEMS

Because most urban rivers have been used (and abused) for other purposes, recreational use today generally demands redevelopment. This is not an easy task. It is complicated by the differences between cities—physical setting, historic background, financial capability, policies, and objectives. Hanna's study in 1974 of 119 major cities in the United States revealed that even though redevelopment is plagued with many obstacles, it is taking place.

For example, out of 107 major cities that have water resources suitable for redevelopment, 68 had proposals, 59 had proposals that had reached the planning stage, 28 were implementing plans and 14 had completed some kind of waterfront development (Hanna 1974). And, most of this interest has developed since 1960. A follow-up study in 1976 shows that 12 more cities have begun implementation (Hanna 1976).

The initiators of projects were about equally divided between government and nongovernment groups. However, the majority (64 percent) of projects that have resulted in development were initiated by nongovernment organizations, such as downtown businessmen, historical societies, service clubs, Chambers of Commerce, environmental groups and professional designers and planners. Hanna found that park departments play a passive role, both for proposal initiation and implementation of projects. At the same time, if a nongovernment agent, such as an architectural group, goes too far too fast, there is evidence to suggest the plans will be aborted. Local governments, at least for urban river recreation projects, appear to function well as response agents but not as initiators.

Most cities have difficulty with funding. Many cite this as the main obstacle for redevelopment. Funding for planning comes from a variety of sources but funding for development generally comes from city and federal sources.

Some responses from cities indicate the difficulties as they see them. Galveston-Texas City—"Resources not readily available—too many restrictions in the city core." Colorado Springs—"To date, the city has turned its back to its waterways." Harrisburg, Pennsylvania—"City has not had the financial resources to expend on park and recreation expansion" (Hanna 1974).

Hanna offers the following suggestions for cities contemplating redevelopment of water resources for recreation:

1. Treat every situation as unique. Solutions in other cities may not apply.
2. Create a proposal with which the community can identify. Blue-sky proposals are bound to defeat.
3. Citizen participation in both planning and follow-through is important.
4. An opportunistic approach that links development with some major event, such as a fair, has merit.
5. Anticipate funding problems before they develop.
6. Commitment by someone with action authority is important.
7. Anticipate sources of opposition and develop research information that either corrects improbable plans or refutes the opposing arguments.
8. Enter into redevelopment with a high degree of professionalism—designs that are creative but functional; funding that is possible; social sensitivity to needs of the community; a sensible relation to local economics.

Further analysis of studies of urban recreation potential revealed the need for following a series of guidelines even though each city has unique conditions (Gunn et al. 1974). These guidelines included three phases:

1. A city should perform a preliminary investigation to identify water resources and to assess their characteristics, especially the factor of water level control. There is little need in proceeding further if flooding is a threat.
2. Based upon the outcome of the preliminary investigation, a three-part investigation in depth should take place. An appraisal of the motivating factors should be made. An analysis of the site factors will indicate the potential for urban recreational use. Other factors, such as land economics, transportation and other externalities should be investigated.
3. If the results of the above
studies are favorable, conceptual solutions and recommendations for development and implementation can be made.

CONCLUSIONS

Review of urban river development shows many gains in recent years. Truly a renaissance of urban waterfronts is taking place.

There is growing evidence that the recreational redevelopment of urban rivers can stimulate revival of downtown vitality. This is important at a time when urban core decay is more likely the rule. Property values can be recovered, civic interest can be redirected downtown, and business can be stimulated from both local and tourist markets.

Social gains from urban river redevelopment are great. Opportunities are abundant for ethnic mixing, for pleasurable relaxation, for low cost leisure, for diversity of interests, and for the re-establishment of a civic cultural center.

The planning-through-building strategies are difficult and not uniformly applicable to all cities. Each city has its own physical, social and political conditions that will influence approaches. Generally, however, there must be strong commitment on the part of political leadership.

There appear to be two patterns of development appropriate for urban recreation redevelopment of rivers: the "ribbon" type and the "node" type. Each is suited to different recreational functions and has its own special planning problems.

Traditional categories of either parks or business blocks may not be as well suited as newer and more creative concepts. For example, the park-business amalgam, illustrated by the San Antonio River Walk, provides the advantages of parklike settings and beautiful landscapes and yet offers opportunities for cultural activity, entertainment and economic gains from certain businesses, particularly restaurants, gift shops, conference centers, and hotels.

The urban-rural context is an important foundation for planning recreational river systems. Because many separate cities and counties are involved, individual local action—both private and public—is required. However, the extensive dynamics of rivers demand high level coordination, probably best carried out at the State level.

Urban river recreation is a growing and vital segment of total water recreation development that now holds great promise for both social and economic impact, if planned and managed to do so.