

Whitewater Parks, *An Economic Development Hypothetical.*

The Hypothetical.

Communities are generally looking for ways to distinguish themselves for the benefit of their residents and businesses. Historic sites and persons are exploited as are natural features. Visitor attracting playgrounds and theme parks serve the purpose...the purpose being to bring outside money into the local economy. And, by the way, provide an interesting, educational or cultural experience for local residents and employees.

One concept available to a limited number of communities is an attraction featuring kayaking and whitewater rafting, possibly with two channels, one for families and one for whitewater. Natural features and engineered environments determine the specific program for the park. A stream with topographic diversity is a great asset, but not essential as the following examples show.

Background.

Whitewater kayaking and canoeing has been an Olympic Sport since 1924. In recent Olympic years. Extensive and beautiful whitewater courses for canoe and kayak racing have been constructed as pictured in Attachment A, Olympic Canoe and Kayak History. The sport is popular with spectators and the Central Florida Whitewater Park offers visitors the chance to participate in this adventurous sport. A summary of the sport's history:

"Olympic canoe and kayak history is a story that spans almost a century. Since the first Olympic canoe event in 1924, canoe and kayak disciplines have grown massively. From breakthroughs in boat design to brand new disciplines, canoeing at the Olympics has developed from a 'demo' event into a 16 discipline sport which is still growing today." **LINK:**

<https://mpora.com/adventure/kayaking/canoeing-kayaking-olympics-complete-history-sport>

Rivers, streams and spillways offer great potential for being developed into a significant whitewater canoe and kayak entertainment and sporting facility. The controlled elevation of a lake or headwater can create a drop that enables a flow of water enticing to avid sports men and women.

Funding sources are available from an environmental preservation and enhancement perspective and from an economic development aspect. Cities, counties, regions and states are potential beneficiaries of environmental, educational and recreational attractions; such as whitewater adventure parks. Private capital is a big source since whitewater facilities are often associated with resort developments.

Successful attractions also beget peripheral economic developments such as hotels, restaurants, campgrounds, stores and shops. Specialty sports like kayaking also draw boat manufacturers, equipment providers and instructional activities. Private-public partnerships based on local land and waterfront participations, state or federal grants and private capital can create the traditional win-win-win...the private investors get profit-yielding businesses, the local governments get taxes and fees and the local economy gets jobs and family incomes.

Economic Impact.

In early 2018, an economic impact study was jointly funded by the Town of Inglis, the Florida High Tech Corridor Council, the Felburn Foundation, Nature Coast Business Development Council and Duke Energy. *Conceptual Impacts of Whitewater/Adventure Parks* was prepared by WHOwen Consulting, Inc and Vernet Lasroad, Ph.D. of UCF. The study defined three levels of park development from minimal to robust levels of activity and estimated the economic impact of each.

Estimated Economic Benefits Proposed Whitewater Park			
	<u>Scenario 1</u>	<u>Scenario 2</u>	<u>Scenario 3</u>
Annual Visits	64,700	100,480	154,200
Average Spending/Day	\$144	\$149	\$153
Total Spending/year	\$9,331,099	\$14,974,685	\$23,538,148
Employment	135	249	404
County Taxes Generated	\$311,371	\$567,340	\$920,531

Source: *Conceptual Impacts of Whitewater/Adventure Parks*, 2018.

Additionally, in 2018 a study entitled **Potential Economic Impacts of a Proposed Whitewater Park: A Market-based Case Study of Stoughton, Wisconsin** was authored by Dan Glynn, Tsung-Lun Hsu, Dave Marcouiller and Bill Ryan. It provides an exhaustive discussion of whitewater recreation facilities.

When you consider the visitors, their room and board, their equipment rentals and sales and their repairs, the dollars add up. As the popularity of the venue grows, the sophistication and costs for hotels, restaurants and equipment grow. Once a reputation is established, the venue thrives until and unless something destroys the success. Performance-based reputation is everything.

Table 5. Expenditures and Visitation Levels of Whitewater Park Visitors*

	<u>Population Daily Expenditure</u>	<u>Annual Visits</u>	<u>Total Annual Expenditure</u>
Average kayakers	\$68.40	14,911	\$1,019,935
Average tubers	\$24.60	22,760	\$ 559,896
Average of all users	\$65.97	44,376	\$2,927,601

* From the reports listed in Table 1, we averaged only those user types that were relevant to the Stoughton application. Kayakers and tubers were listed as uses in a limited number of studies and the sample averages reported were then averaged. All users average includes more types of use thus this is not the simple sum of the two.

LINK:
<https://static1.squarespace.com/static/58efe5c78419c24fe696a016/t/5c5de289fa0d6032b2e8cb85/1549656716728/Whitewater+Park+Economic+Impact+Report+vfinal.pdf>

Conclusions.

Whitewater parks cannot happen just anywhere. A sporting atmosphere is essential along with funding, natural features, commercial and utilitarian infrastructure. But the point is not about creating whitewater facilities, but rather, to use available resources and talents to create an economic and cultural success story. Use available features to build community assets that contribute to the experiences of residents, employees and visitors that enhance the local culture and economy.

Case Studies.

Whitewater parks are examples of communities using natural features to create valuable economic and cultural assets. The following examples make the point. The Stoughton, Wisconsin study cited above provides many case studies in addition to its economic impact information. In addition, a few of note gleaned from the internet are offered below.

Ocoee Whitewater Center

The Ocoee Whitewater Center, near [Ducktown, Tennessee](#), United States, was the [canoe slalom](#) venue for the [1996 Summer Olympics](#) in [Atlanta](#),^{[1][2]} and is the only in-river course to be used for Olympic slalom competition. A 1,640 foot (500 m) stretch of the Upper Ocoee River was narrowed by two-thirds to create the drops and eddies needed for a slalom course. Today, the course is watered only on summer weekends, 34 days a year, for use by [guided rafts](#) and private boaters. When the river has water, 24 commercial rafting companies take more than 750 raft passengers through the course each day.

No longer used for slalom, the hanging slalom gates have been permanently removed. Because the river is dry most of the year, the Center, now operated by the [U.S. Forest Service](#), also serves as a site for [hiking](#), [mountain biking](#), [conferences](#), [weddings](#), and receptions. It receives about 300,000 visitors a year.^[3]



LINK: https://en.wikipedia.org/wiki/Ocoee_Whitewater_Center



U.S. NATIONAL WHITEWATER CENTER



The U.S. National Whitewater Center (USNWC) is dedicated to the promotion of the active lifestyle. Since 2006, the USNWC has been promoting access to the outdoors for all levels of participants through its 30+ land and water-based activities, outdoor instruction and certification programs, festivals, races, films, and various outdoor events throughout the year. Whether you visit the Center's 1,300 acres on the Catawba River or engage in the brand's mission through one of our off-site initiatives, the USNWC empowers guests to play, relax, and learn outside.

PLAY

The USNWC's 1,300 acres offers a wide variety of outdoor activities for all ages and skill levels. Guests can enjoy [whitewater rafting](#) and [kayaking](#), [flatwater kayaking](#), [stand-up paddle boarding](#), [rock climbing](#), [zip lines](#), [ropes courses](#), a [canopy tour](#), and [mountain biking](#) on our [40+ mile trail system](#). Throughout the year, the [Whitewater Race Series](#) challenges participants through various competitions in different sports including trail running, kayaking, mountain biking, triathlons, ultra-marathons and more.

RELAX

For those looking to kick back, live music and outdoor festivals create a unique atmosphere of relaxation and community. The [River Jam](#) concert series takes place every Thursday, Friday, and Saturday evening throughout the summer months, in addition to 9 [unique festivals](#) held throughout the year. The [River's Edge](#), [Pump House Biergarten](#), Adventure Dining opportunities, as well as multiple event/meeting venues offer relaxing experiences after a long day of outdoor adventure.

LEARN

The USNWC utilizes various adventure sports and natural environments onsite and throughout the region to develop leadership and communication skills. Skill development programs include specialized [instruction and certification](#), [summer camps](#) for children and teenagers, and customizable [team development](#) courses for groups and schools, testing the mental and physical limits of participants in the wilderness. Learning opportunities are available to individuals, families, and groups of all ages and skill levels.

The mission of the U.S. National Whitewater Center is to build stronger communities by:

- Promoting healthy and active lifestyles,
- Developing environmental stewardship, and
- Encouraging family and civic interaction.

The U.S. National Whitewater Center (USNWC) is a locally owned and operated, North Carolina 501(c)(3) nonprofit organization. Situated on over 1,300 acres of woodlands, the USNWC fosters an environment for people to come together to play outside.

Dedicated to promoting healthy and active lifestyles and developing environmental stewardship, the USNWC is home to the world's largest man-made whitewater river, offering premier outdoor activities including whitewater rafting and kayaking, flatwater kayaking, mountain biking, rock climbing, ziplines, a canopy tour, rope courses and various team building activities. The Day Pass is the most popular way to experience the USNWC, offering access to available activities on the day of a visit.

Source: U.S. National Whitewater Center | 5000 Whitewater Center Parkway | Charlotte, NC 28214 | [704.391.3900](tel:704.391.3900) | info@usnwc.org

Olympic canoe and kayak history

[Written prior to the Tokyo Olympics]

LINK: <https://mpora.com/adventure/discovering-adventure-we-went-to-wales-with-sam-pilgrim-and-jamie-nicholls/>

Olympic canoe and kayak history in the 1920s

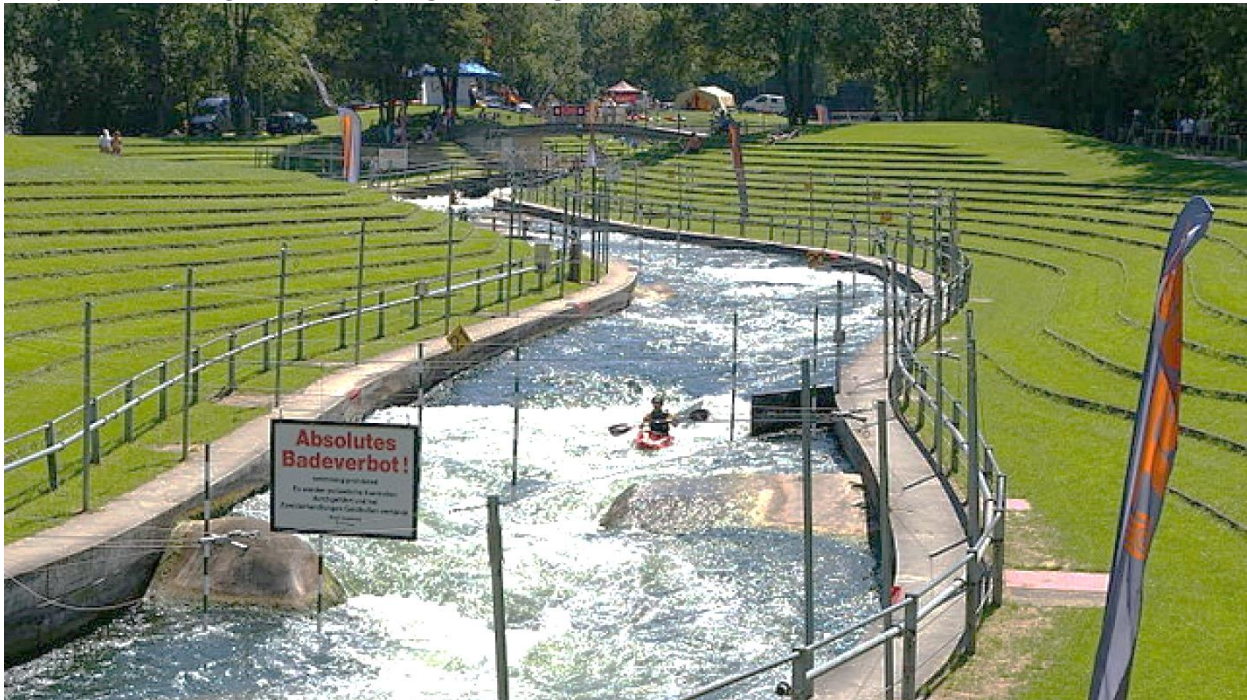
Canoeing's Olympic debut was short and sweet. At the 1924 Paris Olympics, it was introduced as a demonstration sport and then not heard of again for over a decade. In 1924 only American and Canadian athletes took to the water in a series of Sprint races. Kayaks and canoes both demoed with 1, 2 and 4 paddle events for both styles of boat.

Olympic Canoe And Kayak History In The 1970s

The 1972 Munich Olympics saw a big change for the Olympic canoe programme as slalom finally became part of the Games. K1, C1 and C2 classes were introduced for the men and C1 for women. Thanks to the Cold War, strong ideological divisions between East and West Germany were running high with both the Soviet Occupied East and the more liberal democratic West both looking to prove they were top dog.

In preparation for slalom's entry into the Olympics, West Germany constructed the 14.9 million Deutsche Mark (\$24.5m today) artificial whitewater stadium at Eiskanal. As the only facility of its kind in

the world, West Germany had a distinct advantage in terms of training but East Germany, determined to give the Westies a run for their money, sent undercover agents to map out the site and rebuilt a secret copy of the course in Zwickau. The James Bond shenanigans paid off as East Germany destroyed all competition, taking home every single slalom gold medal.



Eiskanal Whitewater course, Germany -Canoeing and Kayaking in the Olympics | A Complete History of the Sport

Olympic Canoe And Kayak History In The 1980s

Steve McGill

East and West remained at loggerheads throughout the 80s. The USA boycotted the 1980 Moscow Olympics and then the Soviet Union and several of its allies skipped the 1984 Los Angeles Olympics as payback. 1984 was the first time in two decades that the Soviets hadn't won an Olympic canoe or kayak medal but they remained one of the top two canoe nations alongside close friend East Germany, taking almost half of all Gold medals during the 80s.

Olympic Canoe And Kayak History In The 1990s

1991 was big news for Olympic canoe and kayak history with the break up of the Soviet Union. The Eastern Bloc powerhouse had competed in its last Olympics, but had already won enough golds to still top the medal tables up to Rio 2016.

Canoe slalom made a triumphant return at the 1992 Barcelona Olympics, becoming a permanent fixture on the Olympic canoe and kayaking programme. Following its reunification in 1990, a newly united Germany showed what East and West could achieve when they worked together rather than throwing all their toys out of the pram. Topping the medal board Germany took home almost as many canoe and kayak golds as the rest of the world put together and lead the medal tables for the rest of the decade.

The other big news of the 90s was that Britain finally learned how to paddle, as Gareth Marriot snagged Silver at C1 Slalom in Barcelona. Canoe slalom history was also made at the 1996 Atlanta Games which

were the only Olympics to feature an almost completely natural whitewater course based in the Upper Ocoee River in Tennessee. The only change made to the river which was narrowing it slightly to intensify the water flow for the event.



1996 Olympics Atlanta, whitewater canoe slalom course, Ocoee River - Canoeing and Kayaking in the Olympics | A Complete History of the Sport

Olympic Canoe And Kayak History In The 2000s

For the 2000 Sydney Olympics, sprint boat width restrictions were lifted, sparking a new wave of boat designs. With no width limits, the new slimline boats boosted performance throughout the sport resulting in finals like 2008 where the Men's C1 1,000m final had sub 4-minute times across the board.

Olympic Canoe And Kayak History In The 2010s

London 2012 marked the introduction of men's 200m races in C1 K1 and K2 and the further expansion of women's events with a K1 200m race. [Rio 2016](#) will also herald changes as it will be the last Games to feature men's C2 slalom. London 2012 showcased Britain's best canoe performance, placing third in the medal tables with four medals including Gold in Men's C-2 Slalom and K1 200m. Germany and Hungary still top the leader boards but if Team GB builds on this early success the 2010s will be Britain's most successful decade yet in Olympic canoeing - there are several strong [medal contenders in canoe events](#) from Team GB at the Rio Games, giving us high hopes that we can beat the haul from London.

Olympic Canoe And Kayak History In The 2020s

With almost a century of history behind [canoeing and kayaking](#) there's bound to be plenty more to look forward to in the Tokyo 2020 games and beyond. Boat design continues to evolve and a new programme agreed by the International Canoe Federation [ICF] will give a more even spread of men's and women's events. Dropping several men's competitions such as the C2 slalom and a few of the men's sprints will make room for more women's events including the new C2 500m sprint and C1 Slalom, clearing space for new pages to be written in the Olympic canoe history books.



Kimberley Woods kayaking at Lee Valley White Water Centre - Kayaking And Canoeing | The Kimberley Woods Interview

LINK: <https://mpora.com/adventure/discovering-adventure-we-went-to-wales-with-sam-pilgrim-and-jamie-nicholls/>

Canoeing & Kayaking in the Olympics | The Rio 2016 Whitewater Stadium

The Olympic canoe and kayak slalom course up close

LINK: <https://mpora.com/adventure/kayaking/canoeing-kayaking-olympics-rio-2016-whitewater-stadium/>

The multi-million pound Rio 2016 Whitewater Stadium consists of two slalom courses. The first is a 200-metre long class II to III training course while the second is the 250-metre long class II to IV channel that will be used for competition.

Between them, these two whitewater courses contain 25 million litres of water with a combined flow rate down both channels of 22 cubic meters per second. To put that in perspective that's almost the same as [Lee Valley](#), the venue for the London 2012 canoe and kayak slalom, which pumps 10.5 cubic meters per second down its training course and 13 cubic meters per second for Olympic level competition. The stadium will also feature temporary seating for 8,424 spectators during the Games.

The Rio 2016 Whitewater Stadium has been designed by Cundall and Whitewater Parks International (WPI), the same team behind London 2012 venue, [Lee Valley Whitewater Centre](#) in Hertfordshire.



As part of the design process this experienced team created a 1:13 size scale model of the Rio 2016 whitewater course at the Czech Technical University Hydraulic Laboratory in Prague. Using tiny magnetic barriers to simulate the full-sized Rapid Blocs system they would be using in Brazil, Cundall and WPI were able to reduce the width of the Rio whitewater channels, creating a more efficient course that was also cheaper to build. Work started on the Rio 2016 Whitewater Stadium in August 2014.

LINK: <https://mpora.com/adventure/kayaking/canoeing-kayaking-olympics-rio-2016-whitewater-stadium/>