They trust us

Hydrostadium has built numerous whitewater stadiums around the world.

Many of our clients are municipalities or recreational companies. Over the past 25 years, EDF and its subsidiary Hydrostadium have designed a number of Olympic facilities, including Athens, Sydney, and Beijing.

Cardiff (GBR)

Cracovie (POL)

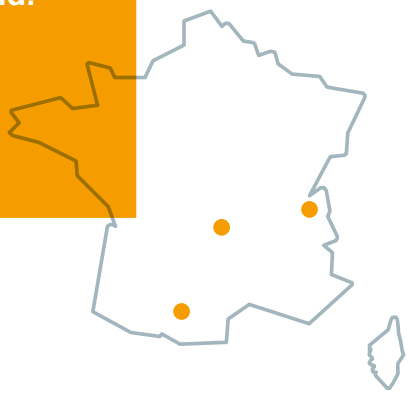
Diekirch (LUX)

Nottingham (GBR)

Vienne (AUT)

Zoetermeer (NLD)

The headquarters of Hydrostadium are located in Annecy and have two subsidiaries, one in Toulouse and one in Clermont-Ferrand.



Pascal SIMON
Managing Director
Co-inventor of the mobile obstacle system.

Gilles BERNARD
Executive Director
Three-time world canoeing champion
Has been creating whitewater stadiums since 1990.

hydrostadium
GROUPE EDF

22 avenue des Vieux Moulins
74000 Annecy - France

Joint-stock company with €1,000,000 in capital
RCS Annecy TGI B Siret 43828966200035 - NAF 7112B

www.hydrostadium.fr

hydrostadium
GROUPE EDF

WHITEWATER INNOVATOR


Charlotte (USA)


Pekin (CHN)


Sidney (AUS)


Athènes (GRC)

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GROUPE EDF

WHITEWATER STADIUMS

Outdoor sports in the heart of the city.

Auckland (NZL)

Whitewater stadiums: total water control

A whitewater stadium is an aquatic playground that brings all the aesthetic and recreational benefits of a river right into the centre of the city.
It's completely safe, because the water flow can be stopped at any time. Many different options are available, from redesigning existing canals to creating Olympic facilities.

Urban rivers
This type of setup not only allows city dwellers to enjoy water sports on their doorsteps, but also brings a cool and refreshing touch to the urban environment, making parks and green spaces more pleasant and attractive.

Some surprising uses
Whitewater stadiums can also be used to train firefighters in swift water rescue techniques, including flood conditions.
We can even regulate water flow rates by adjusting the valves or varying the number of pumps.

Tours (FRA)

Tours (FRA) / Réf. SDIS37

Mobile obstacles: a simple, modular system

The Omniflots® mobile obstacle system first introduced by EDF in 1991 set an industry standard for creating technical whitewater courses. And with this third generation, Hydrostadium has refined the system even further. The basic idea remains the same: allowing fast and easy changes to the water movement without having to vary flow rates. Whitewater stadiums equipped with Omniflots® III can cater for beginners and high-level athletes, alike.

Hohenlimburg (DEU)

System benefits:

- **Light (non-weighted)**
- **Fast obstacle setup and repositioning**
- **Now safer than ever for users**
- **Rounded hexagonal shape**
- **Controllable space between obstacles, regardless of their position**
- **Hexagonal shape prevents water loss between obstacles**
- **All materials recyclable at end of life**
- **Stronger materials**
- **Locking system to protect against theft and unauthorized reconfiguration**
- **Compatible with all Omniflots® systems produced since 1991**
- **Easy management of water movement and difficulty levels**

> KNOW-HOW AND EXPERIENCE

KEY FIGURES

3 OLYMPIC GAMES
+30 WHITEWATER STADIUMS EQUIPPED WITH OMNIFLOTS OBSTACLES
+5000 OBSTACLES SOLD
6 PATENTS FILED

Lab-tested course performance

Hydrostadium's know-how and experience enables it to digitally calculate the hydraulic dimensions of whitewater stadiums.

In special cases, the design must be tested using physical models. **Hydrostadium has a hydraulic laboratory where it can conduct physical tests at various scales.**

Local design constraints

Three parameters to consider:

- The required surface area varies according to the type of water supply and the desired river length. For example, 6,000 m² was needed for the small whitewater stadium in Tournon Saint Martin vs. 70,000 m² for the whitewater stadium in Athens.
- Water can be supplied by natural gravity feed, by tidal storage, or by a pumping station, in which case the reservoir must have an optimal area of 10,000 m² for a 250 m river.
- The slope must be between 0.5% and 20%. For a 250 m whitewater stadium the vertical drop is 3.75 m.

RiverBox®

Hydrostadium developed a new concept of whitewater rivers – the RiverBox®. A course that can be dismantled and transported with an adjustable slope.

The RiverBox® is made up of mobile modules arranged on scaffolding in a watertight pool.

This technique makes it possible to vary the slope from one facility to another.

Class II to Class V.

Courses can be configured according to the desired difficulty level—from novice to Olympic level.

Three technical features

- A 220 m course can be installed in an area smaller than a soccer field
- The required volume of water is a third of that of an Olympic pool.
- Pumping station power requirements are similar to those of a chairlift.

The RiverBox® was designed for events such as the Olympics and the Youth Olympics.

The RiverBox® can also be built as an 80 m whitewate.