

US National Whitewater Center

Charlotte, North Carolina

**Detail engineering and design of
Pumping station, concrete,
and channel automation systems**



Completed in August, 2006, The US National Whitewater Center is the world's largest and most complex re-circulating whitewater river.

Perigon was selected to provide multi-discipline engineering and design for the pumping station, control tower and reinforced concrete of the water channels and ponds. This highly successful project holds 12 million gallons of water with seven 620 HP lift pumps moving more than 536,000 gallons of water per minute with an elevation change of 21 feet between the upper and lower ponds. Perigon provided:

**POPULAR
SCIENCE** BEST
OF WHAT'S
NEW
**2006 Best of What's New
Award winner in the
Recreation Category**

- Facility electrical power distribution planning and design, including power company technical coordination and owner representation.
- Complete Pump house and Control Tower design, including automation of pump systems, and water control gates to provide complete variability of conditions of the rapids up to Class IV. Also included was power, lighting, mechanical, and HVAC design.
- Structural design of the poured-in-place concrete lift station /pump house for the seven submersible pumps.
- Foundation design of conveyor system, concrete retaining walls, and channel slabs of the concrete lined multi-channel system.