Woods Hole Research Center and Woods Hole Oceanographic Institution invite you to join a science expedition on the Columbia & Snake rivers in October 2017. This is the third river expedition that WHRC and WHOI have undertaken together that will showcase the work of scientists involved in the Global Rivers Observatory (GRO), a group dedicated to advancing understanding of how climate change, deforestation, and other disturbances are impacting river chemistry and land-ocean linkages (www.globalrivers.org).

In 2017, the GRO scientific team will meet aboard the MV Island Spirit, a 32-passenger, privately chartered vessel solely for GRO scientists and guests. There is nothing ordinary about this expedition! A team of international scientists will explore the future of river science and outline a plan to catapult river science into the 21st century. Guests will be invited to work alongside scientists as they develop projects and collect samples; participate in evening discussions and presentations; and take side trips to explore both natural and engineered areas along the rivers. The Columbia River is the largest river in the Pacific Northwest and forms most of the border between Washington and Oregon before emptying into the Pacific Ocean. The Snake River is the Columbia's largest tributary. Expect a relaxing, educational, and unique adventure!

A Unique Travel Opportunity

October 14-20, 2017
Columbia & Snake Rivers Science Expedition
with WHRC and WHOI

EXPEDITION DETAILS

- Travel dates: October 14–20, 2017
- Cost: $6,000 per person, double occupancy (50% due at reservation)
  A tax deductible contribution of $2,500 is included in the trip cost and will support the Global Rivers Observatory project.
- All payments are non-refundable. The purchase of trip cancellation insurance is highly recommended.

Included

- 7 days/6 nights aboard the Island Spirit
- All meals and off-ship excursions
- Daily cocktail hour
- Expedition guides from WHOI and WHRC
- Cruise director/naturalist on board
- Airport transfers to and from ship
- Gratuities for crew
- Airfare not included

EXPEDITION LEADERS

Max Holmes (WHRC)
Dr. Holmes is an earth system scientist who studies rivers and their watersheds and how climate change and other disturbances are impacting the cycles of water and chemicals in the environment. He is particularly interested in the fate of the vast quantities of ancient carbon locked in Arctic permafrost, which may be released as permafrost thaws, exacerbating global warming. Dr. Holmes recently served for two years as Program Director of NSF’s Arctic System Science Program and in 2015 was named National Fellow of the Explorers Club.

Bernhard Peucker-Ehrenbrink (WHOI)
Dr. Peucker-Ehrenbrink is a geologist who uses chemistry, particularly isotope chemistry, to investigate how Earth has evolved. He has done research on modern and ancient marine sediments, seawater, rocks from the bottom of the ocean, and meteorites. For the past decade he has been trying to find out how rivers transport water, chemicals and sediments from land into the ocean, and how this land-to-sea transport affects the chemistry of seawater and marine sediments. The Global Rivers Observatory is a key resource to answer these questions.

MORE INFORMATION / RESERVATIONS
Please contact Beth Bagley at 508-444-1517 or ebagley@whrc.org.
GENERAL ITINERARY
subject to minor changes; daily science activities will be incorporated into the general itinerary

DAY 1
Arrive Portland International Airport, Portland, Oregon. Transportation provided to Astoria, Oregon where you will board the Island Spirit. A relaxed day with a light program.

DAY 2
Explore the local waters near Astoria. Options include a boat trip into the Pacific Ocean, a fishing trip, or kayaking. In the afternoon, visit Cape Disappointment State Park & Lewis and Clark Interpretive Center. Situated on cliffs 200 feet above the Pacific Ocean, the Center commemorates the location where the explorers finally laid eyes on the Pacific after five months and more than 4,000 miles covered. Cruise east to Stevenson, WA where the Island Spirit will dock for the evening.

DAY 3
A highlight of any trip to the Pacific Northwest is Multnomah Falls. Travel by coach bus along the Columbia River National Scenic Byway, stretching across some of America’s most beautiful landscapes with stunning views of the Pacific Northwest. The historic Crown Point Vista House, built in 1916, offers panoramic views of the Columbia River. In the afternoon, drive a short distance to visit the Bonneville Dam. Take a guided tour through the powerhouse and watch the turbines at work. Explore the Columbia Gorge Interpretive Center with its educational exhibits, underwater fish-viewing windows and views of Table Mountain.

DAY 4
A morning at leisure filled with amazing scenery as the Island Spirit cruises to The Dalles, OR. Later, travel by coach bus to sample some of the superior wines of the region. Tour the Columbia Crest Winery in Paterson, WA, which has grown from a small winery in a relatively unknown wine region to one of the most significant wineries in the U.S., and a major force behind Washington State’s emergence as a world-class wine region. Continue cruising east to Tri-Cities, WA where the Island Spirit will dock for the night.

DAY 5
Take a tour of the Nine Canyon Wind Project, one of the largest public power wind projects in the nation. The project’s 63 turbines generate 96 MW of clean, renewable energy. Aligned on the ridge tops of the Nine Canyon area, the turbines are positioned to take advantage of persistent strong winds along the Columbia River Gorge. The tour includes a walk to one of the turbines to see and learn about the inner workings. Cruise on to Clarkston, WA.

DAY 6
A highlight of the expedition is the Hells Canyon Jet Boat Experience. Explore North America’s deepest gorge in comfortable jet boats. Enjoy the beautiful natural setting with its remarkable geological landscape and view abundant wildlife. An extra bonus: a stop at the Idaho Garden Creek Preserve, owned by the Nature Conservancy, in Hells Canyon. Then, choose how to spend your last afternoon aboard the Island Spirit. Go ashore to visit Lewiston, ID and Clarkston, WA, or perhaps enjoy a final kayak excursion.

DAY 7
After breakfast, travel by coach bus to Spokane International Airport (about two hours) to connect with flights, or extend your trip with an optional stay in the Spokane, Washington - Coeur D’Alene, Idaho area.