I am Howard Learner, the Executive Director of the Environmental Law & Policy Center (ELPC), which is the Midwest's leading environmental legal advocacy and sustainability innovation organization. ELPC’s staff is engaged in the Great Lakes states, in Washington D.C. and with Canada to protect the Great Lakes. Since 2008, we have participated with policymakers and colleagues to build, effectively implement and expand the successful Great Lakes Restoration Initiative (GLRI).

Thank you Chair Pingree, Ranking Member Joyce and all members of the Subcommittee for the opportunity to submit testimony in support of full funding for the Great Lakes Restoration Initiative for FY 2023 at $400 million as provided in the Great Lakes Restoration Initiative Act of 2019. GLRI funds have been effectively deployed to protect safe clean drinking water supplies, clean up toxic sites, protect wetlands and shorelines, hold off invasive species from entering the Great Lakes, and safeguard aquatic resources. Restoring the Great Lakes creates substantial environmental, public health, and recreational benefits, as well as fostering economic growth. GLRI is a program that has worked very well and has demonstrated successes.

The Great Lakes are a global gem. They contain 21% of the planet’s fresh water supply, and 42 million people rely on the Great Lakes for safe drinking water supplies. They provide a rich aquatic habitat for many species. They support a $7 billion annual fishing industry, and Great Lakes recreation draws millions of tourists who boost the economies of shoreline communities. In short, the Great Lakes are where many millions of people live, work and play.

ELPC strongly supported the bipartisan reauthorization of the GLRI and the ramp up of funding to $475 million in 2026, matching the funding that the program received in its initial year. While we are disappointed that the GLRI FY 2022 funding at $348 million falls short of the authorized $375 million, the Committee has the opportunity to get GLRI funding back on a better track for FY 2023. We request that the Committee fully fund the GLRI program with at least the authorized $400 million for FY 2023 and, hopefully, consider a higher amount.

I’ll make two points in support of fully funding the GLRI:

**First**, the Great Lakes Restoration Initiative is vitally important and it is successful. This is a model federal program providing great environmental and economic benefits, and it is working well.

**Second**, the challenges to the Great Lakes from increases in harmful algal blooms and climate change merit full funding of at least the authorized $400 million for FY 2023, and the program and the Great Lakes could benefit from an even higher amount.
1. The Great Lakes Restoration Initiative is vitally important and successful. This is a model federal program providing great benefits, and it is working well.

The Great Lakes Restoration Initiative has been a breakthrough program, injecting critical funding and structure that had been missing in order to restore the Lakes. Over the past 13 years, the GLRI has achieved strong results with sustained funding. As the third GLRI Action Plan states: “the GLRI has been a catalyst for unprecedented federal agency coordination, which has in turn produced unprecedented results.” The program supports shoreline and wetlands protection projects, keeping out invasive species, and reducing harmful algal blooms. Congress has recognized the effectiveness of the Great Lakes Restoration Initiative with strong bipartisan support for reauthorizing the program with increased funding.

The GLRI funds and supports thousands of projects across the Great Lakes states to:

- Improve water quality for safe drinking water supplies, fisheries and aquatic habitats.
- Protect shorelines and restore wetlands.
- Protect and restore native habitats and species.
- Help prevent and control invasive species.
- Clean up toxic sediments on lake bottoms.
- Reduce agricultural and other nutrient runoff that causes harmful algal blooms.

The Great Lakes Restoration Initiative creates an effective system of coordination among federal agencies, state entities and local partners to achieve important outcomes. Since its inception, the program has achieved strong results with sustained funding.

There are many examples of GLRI projects that deliver multiple benefits to the Great Lakes – from watershed and natural area restoration projects, to addressing and ultimately delisting of Areas of Concern. The Healing Our Waters Coalition provides numerous examples of projects across the region, including among many others:

- Restoration of West Creek, in Independence, Ohio, including restoration of the Creek’s floodplain, wetlands and stream bank, which is helping to improve water quality in the Cuyahoga River and Lake Erie.
- Stabilization of the Flute Reed Riverbank in Northern Minnesota, which keeps nutrients out of Lake Superior, improves flood plains and creates habitat for fish.
- Improvement of the Burnham Wildlife Corridor in Chicago, which restored natural areas with native species and wildlife habitats, and reduced runoff into Lake Michigan by filtering water before it enters the Lake.

GLRI projects bring together a broad array of partners to achieve the program’s goals and create jobs. The GLRI Action Plan III details work to address Areas of Concern, including some that are now delisted: Presque Isle Bay in Pennsylvania, and Deer Lake and White Lake in Michigan. Significant work remains to be done, however, to fully address the 25 Areas of Concern across the Great Lakes basin. We greatly appreciate that the Infrastructure Investment and Jobs Act added $1
billion for the GLRI. President Biden recently announced in Lorain, Ohio that this additional funding will accelerate clean up and restoration of these toxic Areas of Concern.

GLRI has broad regional economic benefits. A University of Michigan study showed that every federal $1.00 spent on GLRI projects between 2010 and 2016 will produce $3.35 in additional economic activity in the Great Lakes region through 2036.

2. The challenges to the Great Lakes from increases in harmful algal blooms and climate change merit full funding of at least the authorized $400 million for FY 2023, and we urge the Subcommittee and Committee to consider an even higher amount.

While recognizing the GLRI’s successes, the growing threats from climate change and recurring severe algal outbreaks are getting worse.

ELPC commissioned 18 leading Midwest and Canadian scientists to write the state-of-the-science report *An Assessment of the Impacts of Climate Change on the Great Lakes*, which we released in 2019 along with recommended policy solutions. The scientists concluded that climate change is causing significant and far-reaching impacts on the Great Lakes region, including increasingly extreme water level fluctuations – mostly higher, and occasionally lower – which wreak havoc on communities, homes, beaches, businesses and the overall shoreline’s built environment. Annual precipitation in the region has increased at a higher percentage than in the rest of the country, and more precipitation is coming in unusually large events such as derechos and intense storms. Lake Michigan had record-high water levels in 2021; especially when whipped by strong winds and large waves, this led to extensive flooding that damaged the shoreline and infrastructure. According to the National Oceanic and Atmospheric Administration (NOAA), 2021 was the 6th hottest year on record and part of a nine-year period of record-breaking temperatures as climate change continues to impact the Great Lakes and region.

ELPC is now preparing a report that examines the impacts of rising lake levels and extreme weather events, including greater flood risks at several industrial facilities and contaminated sites along the Lake Michigan shoreline in Illinois, Indiana, Michigan and Wisconsin. Using NOAA’s Enhanced Digital Elevation Model data, this new report visualizes the extent and severity of inundation at the sites and nearby areas due to extreme weather events of the scale expected soon.

Climate change impacts on the Great Lakes exacerbate the growing problem of agricultural runoff pollution – mostly fertilizers and manure – that is the principal cause of severe recurring toxic algae outbreaks in western Lake Erie and other Great Lakes shallow water bays. The Ohio EPA concluded that agricultural runoff pollution accounts for 90% of the phosphorus flowing into western Lake Erie.

The Maumee River Basin, which flows into western Lake Erie, is among the priority watersheds included in the third GLRI Action Plan. Using satellite imagery to count and measure Concentrated Animal Feeding Operations (CAFOs) and to estimate the number of animals and amount of manure those facilities produce, ELPC concluded that, in 2018 alone, CAFOs produced over 3.5 million tons of manure. The GLRI could bring greater resources to address this growing source of nutrient pollution.
The current GLRI Action Plan provides a detailed look at strategies to reduce this harmful agricultural runoff pollution, noting the GLRI projects have kept more than one million pounds of phosphorus out of the lakes. The nutrient pollution threats from CAFOs to the Great Lakes region, including those in the Maumee River basin, continue, and are amplified by changing rainfall patterns. GLRI money could be used to fund wetlands restoration to more effectively capture phosphorus, and water testing and monitoring to identify effective approaches to reducing runoff. A more robust GLRI will continue to be an important source of solutions to address this urgent problem.

In conclusion, the Environmental Law & Policy Center commends the House Appropriations Committee and this Subcommittee’s strong support for the Great Lakes Restoration Initiative with each year’s budget. GLRI is a successful program and a model for federal, state and local cooperation. We urge the Committee to fully fund this effective program with at least the authorized $400 million for FY 2023, and request that the Committee consider a higher amount of funding.