I am Howard Learner, the Executive Director of the Environmental Law & Policy Center (ELPC). ELPC 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 Merkley, Ranking Member Murkowski, and all members of the Subcommittee for the opportunity to submit my testimony supporting an increased appropriation for the Great Lakes Restoration Initiative. GLRI is a program that works well and has demonstrated implementation successes. GLRI funds have been deployed to protect safe clean drinking water supplies, clean up toxic sites, protect wetlands and shorelines, help alleviate harmful algae outbreaks, hold off invasive species from entering the Lakes, and safeguard aquatic resources. Restoring the Great Lakes’ vital natural resources creates very high leveraged value gained for environmental, public health and recreation benefits, and for overall economic growth.

The Great Lakes are a global gem, and they contain 21% of the planet’s fresh water supply. 42 million people rely on the Great Lakes for safe drinking water supplies. The Great Lakes provide a rich aquatic habitat for many species, and they support a $7 billion annual fishing industry. 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 was pleased with the bipartisan Congressional support for the reauthorization of the GLRI program which was signed into law earlier this year. The reauthorization ramps up funding to $475 million in 2026, thereby matching the GLRI funding received in its initial year. We request that the Senate Appropriations Committee fully fund the GLRI program with at least $375 million for FY 2022.

I’ll make two points in support of fully funding the GLRI at its authorized amount for FY 2022:

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

Second, the challenges to the Great Lakes from increases in harmful algal outbreaks and climate change especially justify full funding at least at the authorized $375 million for FY 2022.

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 break-through program injecting vital funding and structure that had previously hindered efforts to restore the Great Lakes. Over the past 12 years,
the Great Lakes Restoration Initiative 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 algae blooms. Congress’ recognition of the effectiveness of the Great Lakes Restoration Initiative is reflected in the bipartisan support for full authorized funding of $300 million for FY 2018 and 2019 and increased funding for FY 2020 and 2021.

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 nutrient runoff that causes harmful algal blooms.

The GLRI effectively creates a system of coordination among federal agencies, state entities and local partners to achieve outcomes. Since its inception, the GLRI program has achieved strong results with sustained funding.

There are many examples of GLRI projects that deliver multiple benefits to the Great Lakes from river and natural area restoration projects to addressing and ultimately delisting of Areas of Concern, including among others:

- In Ohio, the restoration of Griswold Creek, which included removal of invasive species and restoration of habitat, and the restoration of Irwin Wet Prairie near Toledo both ultimately benefit Lake Erie.
- In Northern Minnesota, the Flute Reed Riverbank stabilization project keeps nutrients out of Lake Superior, improves flood plains and creates habitat for fish.
- In Illinois, the Burnham Wildlife Corridor in Chicago, which restored natural areas with native species and wildlife habitats, also helps slow down and filter water before it enters Lake Michigan, thereby reducing runoff pollution into the Lake.

These projects bring together a broad array of partners working together to achieve the GLRI’s goals and create jobs. The third GLRI Action Plan details work to address Areas of Concern, including those that are now delisted: Presque Isle Bay in Pennsylvania, and Deer Lake and White Lake in Michigan.

GLRI has broad regional economic benefits. A University of Michigan study showed that every $1.00 of funds 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 severe recurring harmful algal blooms and climate change justify full funding at least at the authorized amount of $375 million for FY 2022.
While recognizing the GLRI’s successes, the threats from climate change and severe recurring harmful 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 shoreline communities, homes, beaches and businesses. Annual precipitation in the region has increased at a higher percentage than the rest of the country, and more precipitation is coming in unusually large events such as derechos and intense thunderstorms. Lake Michigan had record-high water levels in 2021 whipped by winds and waves causing flooding and damaging the shoreline’s built infrastructure.

ELPC is now preparing a report that looks at the effect of rising lake levels and extreme weather events creating flood risks at several industrial facilities and contaminated sites along the western and southern shores of Lake Michigan in Wisconsin, Illinois, Indiana and Michigan. Using data from the Digital Elevation Model prepared by the National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management, the report visualizes the extent and severity of inundation at the sites and surrounding areas due to extreme weather events of the scale expected in the near future. One threat: potential inadvertent releases of dangerous pollutants into nearby communities and Lake Michigan.

Climate change impacts on the Great Lakes intersect with the growing problem of agricultural runoff pollution – mostly fertilizers and manure. These are the principal cause of severe recurring toxic algae outbreaks in western Lake Erie and other shallow water bays in the Great Lakes. The Ohio EPA concluded that agricultural runoff pollution accounts for about 90% of the phosphorus flow 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. ELPC used 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. The data shows that in 2018, alone, CAFOs produced over 3.5 million tons of manure.

The GLRI Action Plan provides a detailed look at strategies to reduce this harmful agricultural runoff pollution, noting that GLRI projects have kept more than one million pounds of phosphorous out of the lakes. But the threats from nutrient pollution from CAFOs to the Great Lakes and region remain, and are amplified with changing rainfall patterns. On April 7-9, 2021, ELPC hosted our 6th Annual Great Lakes Science-Policy Confluence Conference bringing together scientific experts and policy makers to focus on the growing threat of CAFOs and manure runoff pollution to the Great Lakes region. A more robust GLRI is an important part of addressing this problem.

In conclusion, the Environmental Law & Policy Center appreciates the opportunity to submit testimony in support of the Great Lakes Restoration Initiative and urge the Subcommittee to recommend to the full Senate Appropriations Committee an appropriation of $375 million for GLRI in FY 2022. GLRI is a successful program and a model for federal, state and local cooperation.