

Originating Committees: Wetlands and Waterfowl and Rivers, Streams and Fisheries

Authors: George Seek and Emily Tracy Smith

Intended Recipients: Directors and Administrators of Missouri Department of Conservation, Missouri Department of Natural Resources, Missouri Department of Transportation, State Emergency Management Agency, United States Geological Survey, Natural Resources Conservation Service, United States Army Corps of Engineers, United States Forest Service, United States Fish and Wildlife Service, United States National Park Service, Environmental Protection Agency, Federal Emergency Management Agency, Federal Highway Administration, Ducks Unlimited, and The Nature Conservancy

Need for Financial Collaboration to Update Missouri’s National Hydrography Dataset and Missouri’s National Wetland Inventory

WHEREAS, the Missouri National Hydrography Dataset (NHD) and National Wetland Inventory (NWI) datasets were largely developed in the 1980s, with data sources as old as the 1960s; and

WHEREAS, both of these data layers were developed using inputs from separate Geographic Information System (GIS) products; Light Detection and Ranging (LIDAR), leaf-off aerial imagery, leaf-on aerial imagery, and a flood inundation layer; and

WHEREAS, these datasets are currently used by private citizens, Non-Government Organizations, and a host of federal and state agencies including the Missouri Department of Conservation (MDC), Missouri Department of Natural Resources, and many more agencies and conservation partners (see recipients list, above); and

WHEREAS, the age and inaccuracy of Missouri’s GIS stream and wetland data layers are now hindering strategic conservation planning by all associated agencies and their ability to develop measurable objectives related to watershed, stream, wetland, and riparian habitat quantity and quality; and

WHEREAS, aerial imagery is used in almost every aspect of land and water management, including private landowner visits, burn-plan development, invasive species detection, boundary confirmation, habitat classification, land offer assessments, and more; and

WHEREAS, the NHD is used for planning future land and infrastructure development, monitoring water quality, modeling of flood risk, managing stream flow, and conserving habitats; and

WHEREAS, the NWI is used to inform land purchases and development, to plan infrastructure projects, to serve as National Environmental Policy Act baseline data, and to conduct habitat and species assessments; and

WHEREAS, extreme rain events are increasing, resulting in more flooding, associated damage, and rising cost; and

WHEREAS, without up to date NHD and NWI datasets and GIS layers, a host of federal and state agencies will be hampered in efforts to develop effective strategies to deal with future flood events, damages, liabilities, and future infrastructure development; and

WHEREAS, according to MDC, with input from associated agencies, the estimated cost to complete and update all datasets/layers statewide over a six-year budget window exceeds eight million dollars, which would strain any one entity's budget; now, therefore, be it

RESOLVED that the Conservation Federation of Missouri assembled in Osage Beach, Missouri, this 12th day of March, 2022, recognizes the need for updates to the NHD and NWI datasets and requests that all impacted entities work together to develop a shared funding plan to complete the updates by 2027, with MDC facilitating the coordination among agencies.

Searchable Keywords: conservation planning, National Hydrography Dataset, National Wetland Inventory.

Expires: March 12, 2027