



# Protecting Wetlands Through Zoning

## Background

Local zoning or other land use regulation could provide an extremely important tool for protecting wetlands that have lost protections as a result of the Supreme Court's decision in *Sackett v. EPA*. They could provide direct protections for wetlands that might be impacted by urban development, which is one of the primary sources of wetland loss. It is a tool that could identify and strategically protect wetland values at the local level and include requirements for both onsite and offsite preservation, enhancement, and creation of wetlands.

Wetlands deliver many community benefits, along with national and international benefits. These benefits include flood mitigation, groundwater recharge, fish and wildlife habitat, hunting and other recreation opportunities, and filtering pollutants before they enter the surface or groundwater. Wetlands can provide medicinal and cultural resources for Native American Tribes. Coastal wetlands can provide buffers for tropical storms and protect estuaries. Other water quality, migratory waterfowl habitat, and carbon storage benefits of wetlands accrue at the national and often international level.

Wetlands also provide immense economic value to local communities. According to the Mississippi River Cities and Towns Initiative, "The Mississippi River Valley has sustained considerable disaster impacts from droughts, floods, extreme heat, and tornadoes totaling over \$50 billion since 2011. Our cities have experienced a 1,000-year rain event only five years after a 500-year flood. Disasters along the Mississippi River have cost nearly 10 percent of the region's economy in some cases and at least 3 percent annually." As such, Mississippi valley mayors recognize that:

- Natural infrastructure can play a heightened role in cleaning and moving water. Nature can move and manage more water more efficiently, to more benefit than our built infrastructure. The natural infrastructure of the Mississippi River Delta alone provides \$12 to \$47 billion in benefits to the economy annually.

Accordingly, regional mayors have set goals to: "increase the resilience capacity of Mississippi River infrastructure and economy development projects" and to "restore the ecological infrastructure of the Corridor to better protect near-water communities from floods, droughts, and other impacts that devastate the region at unprecedented levels." Local zoning and other local land use regulations present effective tools to achieve these goals.

A potential precursor to effective zoning to protect wetlands is the establishment of a community greenprint. This is a community-level inventory of the natural resource assets of the area (which could include wetlands, grasslands, forests, streams, lakes, and other natural assets) and the benefits they provide. Communities like Lincoln, Nebraska, Blue Earth County, Minnesota, and Lake County, Illinois have developed community greenprints or similar tools which include an inventory of wetlands and other natural assets and strategies for protecting, restoring, conserving, and enhancing them. Indian River County in Florida has an ordinance that requires developers to replace destroyed wetlands at a ratio of two wetlands replaced for every one destroyed.

Actions localities could take to protect wetlands through zoning generally fall into two specific categories: measures to incentivize or require conservation or preservation of wetlands, and measures that would incentivize or require the restoration or creation of wetlands. Localities generally have the power to require or incentivize both on-site or off-site, though on-site is often the preferred and most effective option. These efforts are best backed by efforts that identify wetland resources and are backed by local expertise to help determine the values and functions of wetland resources and what is necessary to mitigate values and functions that may be impacted from development. Specifically, communities (towns, cities, counties, etc.) could:

- Create an inventory of wetlands in their existing jurisdiction through mapping, land surveys, or similar tools.
- Coordinate across jurisdictions to obtain a watershed wide understanding of wetlands to help guide the assessment of wetland functions and values.
- Train local officials to identify and assess wetlands and wetland values.
- Identify areas where development may be restricted based on the area's importance to flooding or other values that wetlands serve (e.g., floodplains, or special local wetlands that would be identified as inappropriate for certain types of use or development).
- Identify criteria for determining what a wetland is and assign values to wetlands to determine the appropriate protection level for the wetland.
- Create zoning requirements that take a hierarchical approach to protecting wetlands by asking developers to first avoid impacts to wetlands, then minimize those impacts that cannot practically be avoided, and finally compensate for any loss of wetland function and values.
- Establish a framework for compensating impacts through preservation, enhancement, restoration (both onsite and offsite), or other appropriate means such as mitigation banking plans.



Localities could also look at other creative measures to incentivize the right type of development such as easing permitting or other requirements for designated development or low-impact areas or providing tax breaks for preserving or not developing areas of high value such as wetlands. Other potential incentives could be explored, like granting developers stormwater management credits for preserving wetlands or encouraging wetland creation as components of stormwater management plans.

We would further suggest that communities pair these measures with proactive tools to preserve and set aside land with important values, primarily:

- **Conservation Easements.** Conservation easements are a tool available in every state to protect wetlands from development. Over 200,000 conservation easements currently protect over 33 million acres of land in the US. If there is not already a local land trust that can use conservation easements to protect nearby wetlands, one can be created or a locally-focused initiative can be launched in concert with a state or regional land trust. Some conservation districts or other agencies can also hold conservation easements, and government agencies and Tribes can acquire wetlands to protect them. Land trusts can leverage federal and state funds, private donations, landowner donations, and local funds to provide for restoration and protection of wetlands. Just as many communities now have a community foundation or a community account at a state-wide community foundation, many more communities can develop a community land trust or a locally-focused initiative at a state or national land trust. Additionally, localities can require that certain impacts from development be mitigated through the off-site preservation, creation, or enhancement of wetlands that are protected by a conservation easement.
- **Land Acquisition.** Smart community leaders recognize the benefits of attractive park, recreation, and open space assets for serving and attracting residents. With thoughtful planning, wetlands and riparian areas can be acquired and incorporated into existing or new community park, recreation and green space projects, providing multiple benefits for the community.

Using planning, zoning, and land use paired with a targeted land acquisition approach and other incentives to safeguard wetlands can help communities protect themselves from flood risk, direct new development into low-impact areas, mitigate the impacts of stormwater systems on wetlands and riparian areas, and protect stream corridors. Policies can require consideration of wetland impacts, and encourage the preservation, restoration or development of wetlands to address potential flooding impacts both onsite and offsite.



## Potential Hurdles

### *Potential Hurdles and Political Considerations*

While zoning can be a powerful tool to protect wetlands on a local or regional level, it has some significant hurdles or limitations. For instance:

- Funding would be needed to adequately identify and assess wetlands and wetland values. Training would also be needed to ensure that local zoning officials have the expertise and ability to assess wetland values and proper mitigation for wetlands impacts. Such expertise, training, and understanding could be beyond the means of some local jurisdictions.
- The geographic scope would be limited. Wetlands in rural areas may not be subject to zoning or land use regulations.
- Wetlands protection is often best guided by watershed planning. As such, many places may require multiple jurisdictions to be committed to watershed planning for the best results.

Smaller, urban areas that have already experienced substantial wetland loss would be more likely to pass such protections. Meanwhile, rural jurisdictions that retain more wetland resources, yet facing more direct development threats, may be less likely to pass such protections.

## Messaging

Messaging of this policy tool would be most effective if it focused on the localized benefits: protecting the community from flooding, protecting source waters, preserving habitat, in addition to protecting special places that the community recognizes and cherishes. Messaging should also focus on economic benefits. For instance, wetland protections through zoning could avoid expensive water treatment upgrades or mitigate expensive flooding that could create expenses local taxpayers would have to bear.

## Resources

- [American Planning Association, APA Policy Guidance on Wetlands](#)
- [Sustainable Development Code](#)
- [Lincoln/Lancaster County \(NE\) Greenprint Challenge, which included recognition and protection of rare inland saline wetlands](#)
- [Bernalillo County \(Albuquerque, NM\) greenprint](#)

