

# Protecting and Restoring the Anoka Sandplain Ecological Region.

The Anoka Sandplain Partnership





## What is the Anoka Sandplain?

Characterized by thousands of shallow wetlands, miles of rivers and streams, and acres of oak savanna and woodlands, the Anoka Sandplain is a unique and vulnerable ecological region located in east-central Minnesota, bounded on the west by the Mississippi River, on the north and east by forested regions, and on the south by the Twin Cities metro area.

## Like a giant sponge filled with billions of gallons of water.

Although highly modified by humans over the past 200 years, the Anoka Sandplain still serves as a critical filter for the aquifer that provides the Twin Cities and east-central Minnesota with most of its drinking water. The region's high water table and porous soils make this area highly vulnerable to water contamination from herbicides, pesticides, fertilizers, pollutants and other toxic materials.



## Home to more than two million humans...

More than two million people depend on the Anoka Sandplain for living and working space, recreation and water. And given the Sandplain's close proximity to the metropolitan area of Minneapolis and St. Paul, the region's attractiveness for homes and recreation is only growing. Representing two percent of the land area of Minnesota, the Sandplain occupies more than one million acres and encompasses wholly or partly 13 Minnesota counties and nearly 70 cities.

In less than two hundred years much of the wild character of the Sandplain has disappeared. However, there are still some natural areas left that possess many of the native plants and animals that were here 200 years ago, including numerous state Scientific and Natural Areas, state Wildlife Management Areas, county parks and two National Wildlife Refuges. Two state-designated Wild and Scenic Rivers—the Rum and the Mississippi—also flow through the Sandplain.

## ...and to an amazingly diverse collection of plants and animals.

Scattered across the Anoka Sandplain region is a complex mosaic of plant communities. Floodplain forests grow along the rivers; marshes, sedge meadows, fen and forested swamps occupy wetland basins; and oak savannas, prairies and oak woodlands flourish on the dry sandy uplands.

Among the most unique natural communities are the prairie remnants and oak savanna relicts. A savanna resembles a prairie of grasses and flowers with scattered craggy oaks that are easy to walk through. Once a common feature of the Sandplain, oak savanna has been reduced to less than 3,800 acres and is a globally imperiled plant community.

The landscape's rich collection of native plant communities evolved with fire. Controlled burning still plays a critical role in maintaining the biological integrity of the Sandplain by improving habitat for wildlife and reducing wildfire fuels in choked woodlots.

Oaks are uniquely fire resistant, especially bur oaks—the signature tree species of the region—because of their thick and corky bark. Some currently living examples of these oaks were young trees when Thomas Jefferson was president.

98 state-listed rare plants and animals make their homes in the Anoka Sandplain, the majority living in oak savannas, prairies and wetlands. Examples include Blanding's turtle, the plains hognose snake, the plains pocket mouse, Wilson's phalarope, the lance-leaved violet, beach heather and tubercled rein orchid.

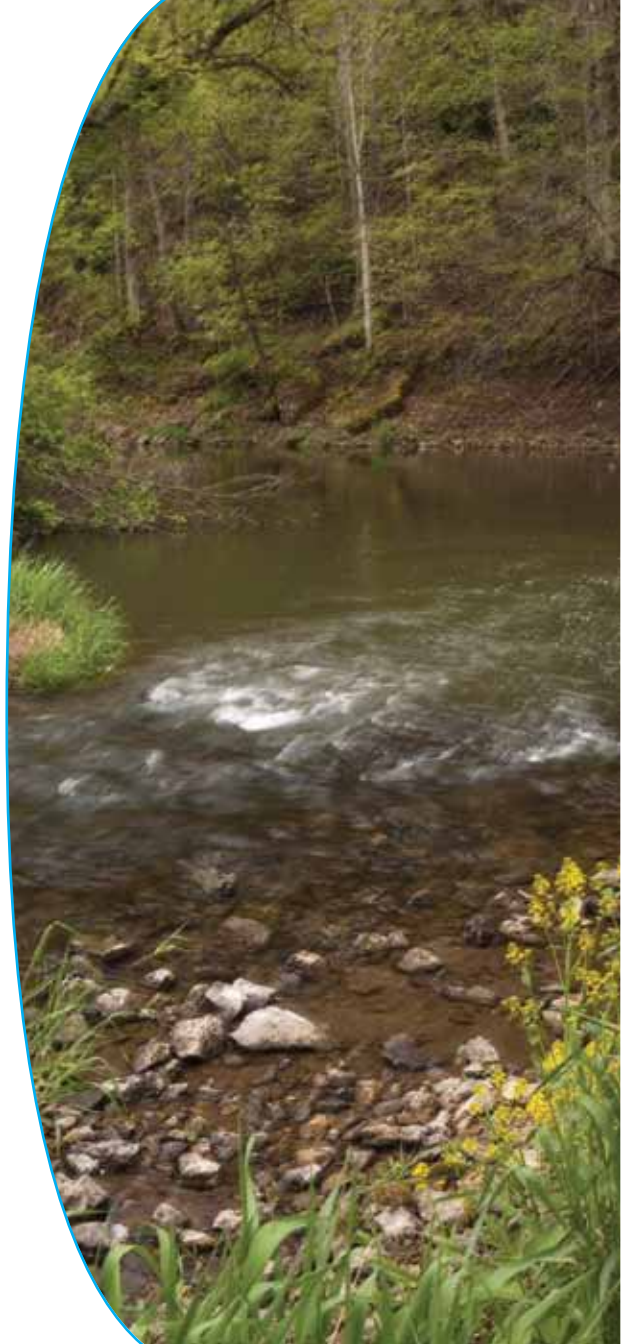


## How can I help the Anoka Sandplain?

- Support and get involved with local groups, such as members of the Anoka Sandplain Partnership, that are helping to protect this threatened resource. These groups provide a wide range of positive opportunities, including volunteer events, local natural area activities and conservation. Visit [www.greatrivergreening.org](http://www.greatrivergreening.org) for a full list of partners.
- Become involved in your local city, township and county planning. Encourage efforts that protect ground water and the integrity of the remaining wild lands within the Anoka Sandplain. By protecting the porous soils from excess nutrients and pollutant runoff, we can reduce the threat of expensive cleanup and health costs to both human and non-human residents.
- Visit wild remnants of the Anoka Sandplain in the various refuges, parks and wildlife areas. Excellent examples can be experienced at Carlos Avery Wildlife Management Area, Sherburne National Wildlife Refuge, Crane Meadows National Wildlife Refuge, county parks and eleven State Scientific and Natural Areas. See the list of websites on the back for locations.
- Preserve or enhance your land. Private landowners who want to steward the land for future generations of humans, wildlife and native plants can make a huge difference. Contact Great River Greening or any of the members of the Anoka Sandplain Partnership for information on specific projects you can do.

Imagine a healthy and vital Anoka Sandplain.





## What we are doing together.

The Anoka Sandplain Partnership—a coalition of 20 conservation stakeholders—is bringing together their collective expertise, resources and connections to advance terrestrial and freshwater resource conservation in this ecological region. Visit [www.greatrivergreening.org](http://www.greatrivergreening.org) for more information and a list of recent projects.

To maintain the health of this unique ecosystem and help restore what is damaged, the Anoka Sandplain Partnership has identified two critical needs:

### **Protect the water quality and supply.**

- Reduce the flow of pollutants and nutrients through the permeable soils into the clean, fresh water stored in the aquifers that provide the region with drinking water. For example, outdated or improper septic systems and nitrogen fertilizers leaching from agricultural lands and lawns produce nitrate pollution that can compromise groundwater.
- Reduce the loss of wetlands and degradation of streams that provide a host of cost-free benefits, such as erosion control, fisheries habitat, flood control, ground water recharge and discharge, water filtering, wildlife habitat and recreation opportunities. Restore drained or tiled wetlands and riparian vegetation whenever possible.

### **Create good habitat and beautiful parks.**

- Maintain and create corridors between wild land areas to help protect the biological integrity of local plant and animal populations.
- Control and eradicate invasive species such as buckthorn, Tartarian honeysuckle, purple loosestrife and cow vetch. Alien species often outcompete and displace native Sandplain species, severely impacting the ecological makeup of the region.
- Restore native plant communities, including oak savanna, prairie, wet prairies, rich fens, other nonforested wetlands and oak woodland habitats. Doing so not only benefits local plant and animal populations but also helps recharge underlying aquifers and helps protect the high water table from pollutants and agricultural chemicals and fertilizers.

## Project contact.

For more information, contact Wayne Ostlie, Director of Conservation Programs, Great River Greening, [wostlie@greatrivergreening.org](mailto:wostlie@greatrivergreening.org) 651-665-9500 x19.

## For more information on Anoka Sandplain ecology, visit these websites:

- The Anoka Conservation District, [www.anokanaturalresources.com/soil/sandplain.htm](http://www.anokanaturalresources.com/soil/sandplain.htm)
- Crane Meadows National Wildlife Refuge, [www.fws.gov/refuges/profiles/index.cfm?id=32555](http://www.fws.gov/refuges/profiles/index.cfm?id=32555)
- Minnesota DNR, Anoka Sandplain profile for the State Wildlife Action Plan, [files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/profiles/anoka\\_sand\\_plain.pdf](http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/profiles/anoka_sand_plain.pdf)
- Minnesota DNR, Scientific and Natural Areas, [www.dnr.state.mn.us/snass/index.html](http://www.dnr.state.mn.us/snass/index.html)
- Sherburne National Wildlife Refuge, [www.fws.gov/midwest/sherburne/oak.htm](http://www.fws.gov/midwest/sherburne/oak.htm)
- University of Minnesota Cedar Creek Ecosystem Science Reserve, [www.cedarcreek.umn.edu](http://www.cedarcreek.umn.edu)
- Minnesota Forest Resource Council, East Central Landscape, [www.frc.state.mn.us/initiatives\\_llm\\_committees\\_east-central.html](http://www.frc.state.mn.us/initiatives_llm_committees_east-central.html)



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