

WILD & SCENIC
RIVERS
GUIDE FOR
RIVERFRONT PROPERTY
OWNERS

*"In the end, our
society will be defined
not only by what we
create but by what we
refuse to destroy."*

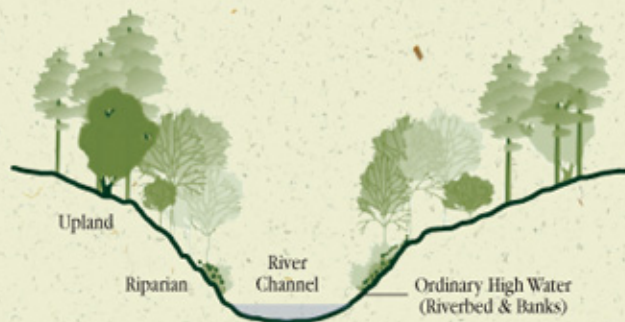
John Sawhill,
The Nature Conservancy



As a riverfront property owner on one of America's premier rivers, you are the ultimate river manager with an opportunity and responsibility to help preserve its natural and cultural values. It is important for you to be aware that a proposed project within the river's bed or banks will be reviewed by the agency managing the river under the Wild and Scenic Rivers Act. This brochure:

- *Introduces the Act and the National Wild and Scenic Rivers System.*
- *Explains how the Act applies to planning and implementing projects on your lands within the riverbed or on its banks.*
- *Shares techniques to protect economic, natural and cultural values on your land.*

The review of projects under Section 7, as explained in the first part of this brochure, is limited to the bed and banks of the river—not the adjoining property. The remainder of the brochure describes voluntary actions that you might take to protect rivers and your property.



NATIONAL WILD AND SCENIC RIVERS

In 1968, the Wild and Scenic Rivers Act created a legacy of protected rivers, the National Wild and Scenic Rivers System. The Act also created a process for adding rivers to the National System.



Upper
Delaware
WSR

The National System protects the natural and cultural values and free-flowing condition of some of the nation's most precious rivers.

For more information on wild and scenic rivers, or to find out who manages your river, please visit www.nps.gov/rivers/.

NATIONAL WILD AND SCENIC RIVERS SYSTEM

More than 160 rivers in 38 states and Puerto Rico comprise the National System. Most designated rivers are administered by the Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, or U.S. Forest Service, often in partnership with local communities.



Allegheny WSR

The National System includes a spectrum of rivers, from cascading mountain streams to rivers meandering through valleys, from remote wilderness to rural and community rivers.

The Act safeguards designated rivers by:

- *Keeping them free-flowing and unpolluted.*
- *Protecting their outstanding cultural and natural values, including water quality.*
- *Allowing existing uses of rivers to continue where they do not conflict with river protection.*
- *Building partnerships among landowners, river users, tribal nations, and all levels of government.*

Wild and Scenic Rivers Act, Section 7

One of the most important provisions of the Act—Section 7—protects the free-flowing condition and other values of designated rivers from the harmful effects of project proposals within the river's bed or banks. Evaluation of the effects of these “water resources projects” is the responsibility of the federal agency administering the river and is triggered by the permit or loan application process. Any water resources project that involves a federal agency via loan, grant, permit or license is subject to review under the Act. Evaluation under the Act will also be required if such federal assistance is needed to maintain an existing project.



Boat docks, one of the many types of water resources projects

PROJECT REVIEW PROCESS

If you own riverfront property along a designated river and intend to construct a project within the riverbed or banks, the project may be subject to evaluation under the Act. Projects that typically require evaluation include:

- *Impoundments.*
- *Diversions.*
- *Channel straightening.*
- *Riverbank revetment (bank protection measures such as riprap).*
- *Structures such as boat docks, fishing piers, and bridges.*

An *outstandingly remarkable value* is a river-related value judged to be unique, rare or exemplary at a regional or national scale. These values may include fish, wildlife, scenic, recreational, geologic, historic, cultural and other similar values. The river-administering agency can tell you which values are found on the segment of the river adjacent to your land.

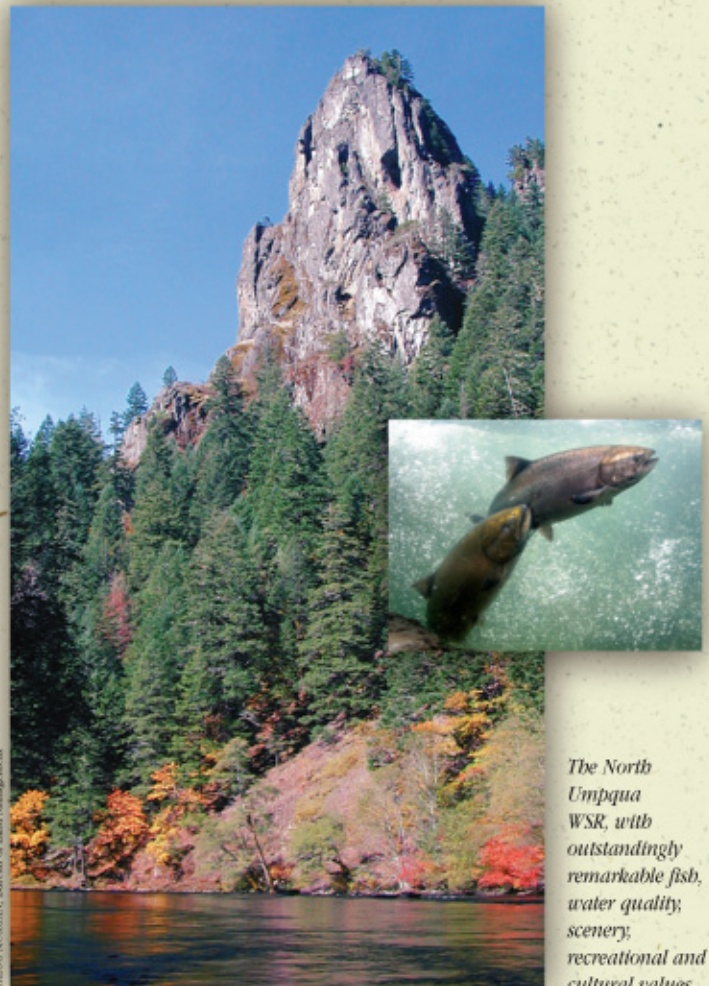
As part of the permitting process, the federal-assisting agency will ask the river-administering agency to make a determination on the project's impacts. This determination is based on an evaluation of the effects of the project on the river's:

- *Free-flowing condition;*
- *Water quality; and*
- *Outstandingly remarkable values.*

Most projects within a river's bed or banks require a permit issued by the U.S. Army Corps of Engineers through its authority under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. Your project may also require other permits from state, county or city governments that are not subject to review under the Act. If you are uncertain whether an evaluation is required, contact the river-administering agency.

Possible outcomes of an evaluation:

- *Your project has no adverse effects on river values. The federal assistance may continue.*
- *Your project has adverse effects on river values. The federal assistance may not continue as proposed.*
- *Your project has adverse effects on river values. The river-administering agency may suggest ways to avoid adverse effects. If you choose to revise your proposal, you may resubmit it to the federal-assisting agency.*



GEORGE MORGAN, Bureau of Land Management

The North Umpqua WSR, with outstandingly remarkable fish, water quality, scenery, recreational and cultural values.

PROJECTS TO CONSIDER

Erosion is a natural process and is necessary for stream health. However, human activities often accelerate erosion, adversely affecting water quality and other river-related values. To help correct these conditions, consider projects that encourage natural processes, including the use of:

- *Native plantings to reduce streambank erosion.*
- *Plant cuttings, wood, limited stone placement, and fabricated mats of natural material to stabilize streambanks, protect the floodplain, and reestablish the riparian area.*



Before

Restoration to reestablish healthy riparian vegetation.



After

THE O'SULLIVAN, LARA LARUE LAND AND LIVESTOCK

These types of projects use plant root systems to bind soil and decrease water velocity, stabilizing riparian areas. Healthy riparian areas enhance natural appearances, provide water filtration, and collect soil to rebuild eroded banks and reduce maintenance costs.

PROJECTS TO AVOID

Projects to avoid include:

- *Concrete, rock or treated wood as retaining walls to redirect the flow of the river.*
- *Concrete or rock structures, such as gabions or stream barbs, that redirect the flow of the river or eliminate its connection with side channels or wetlands.*



Stabilization measures that redirect the flow of the river and eliminate its connection with side channels and wetlands.



These types of projects are expensive to build, are prone to failure, and adversely impact adjacent streambanks. They are also unlikely to be permitted under the Act.

STEWARDSHIP

Most Americans are sensitive to the environment, and they want to do the right thing in managing their property. As a landowner along a wild and scenic river, you can protect your shoreline and property values by watching for signs of water pollution, changes in channel condition (e.g., unnatural widening, eroding banks), and loss of healthy streamside vegetation.



Bank restoration through planting of native species.

WILLIAM KENT, U.S. Fish & Wildlife Service

You can protect your streambank from failure or erosion through simple techniques that are compatible with the dynamic nature of the river. These techniques will help you avoid future problems and protect your property values, the river's free-flowing condition, and other river-related resources. (While these actions are not required under the Wild and Scenic Rivers Act, they may be mandated under local or state laws and regulations.)

ACTIONS TO PROTECT RIVERS

Consider the following voluntary actions to protect and restore your streambanks.

Maintain streamside vegetation: This is one of the most important actions that you can take, and the cost is very low. A healthy streambank needs undisturbed soil and vegetation. The roots of native trees, shrubs and grasses help stabilize the bank and reduce erosion. Streamside vegetation also provides critical wildlife habitat, while providing cover and shade for waterfowl, fish and other aquatic organisms. Leaves and insects dropping from streamside plants supply food for many river dwellers. Healthy vegetation filters sediment and absorbs some nutrients released by upstream activities. This same vegetation can produce a screening effect along the river to provide privacy. Lawns do not provide the same benefits and often fail to protect streambanks during floods.

Keep woody material in the river: Fallen trees can create natural protection for streambanks by slowing the current and allowing the deposition of sediments. Often this provides an environment for new vegetation to establish itself, which in turn helps further stabilize the streambank. Fallen trees also provide cover, shade and food for fish and other river dwellers.



KRATCHE NATIONAL FOREST

Saline Bayou
WSR

Reduce runoff and erosion from bare soil:

Any place where flowing water meets unprotected soil is a potential source of erosion. Typically this includes unpaved roads; driveways or parking areas; earthen drainage ditches; improperly grazed pasture or corrals; and other areas of bare or sparsely vegetated ground. When adding residential improvements, consider locations farther from the streambank, and grade approaches so as not to concentrate water into narrow channels

Limit hard surface runoff: Since hard surfaces do not absorb or filter surface water, they facilitate the transportation of pollutants into the river. Hard surfaces also allow surface water to gain velocity that leads to erosion. Consider ways to reduce hard surfaces on your property. For example, consider using paving materials with openings to allow water to percolate directly into the soil.

Control drainage system impacts: Stormwater collection systems, if not properly designed and located, concentrate pollutants and increase the velocity and force of outflow, resulting in erosion. Prior to installing large drainage systems, you should consult contractors with experience in stormwater management.

Locate new structures wisely: Constructing improvements in the floodplain, or in the path of the river's natural meanders, is risky. It is generally impractical to prevent damage to such improvements over the long term due to the dynamic nature of rivers. Also, flood control and channel stabilization measures are costly to construct and maintain, difficult to engineer, and subject to regulation. Understanding your river—or seeking the advice of those who do—protects both the river and your investments.

Dispose of wastes properly: Disposing of waste material in or along the river—even grass clippings or garden wastes—can harm streamside vegetation and water quality and may be in violation of local,

state or federal regulations. Do not dispose of antifreeze, oil, paint, solvents, detergents or other chemicals anywhere near the river. Consequences of improper disposal can be far-reaching, especially when multiplied by the many households using these common substances.

Apply fertilizers and pesticides wisely:

Choose and use pesticides, herbicides or fertilizers with extreme care. Even small amounts of yard and garden chemicals can be extremely toxic to aquatic organisms. These chemicals can enter the river either as spray residue or in storm runoff. Avoid using these products near your river and exercise caution when applying them.

Check your septic system: Make sure your septic system is functioning properly. Bacteria and dissolved nutrients from poorly functioning septic systems pollute the river and may threaten human health. Replacement of leaking septic tanks or clogged leach fields and timely pumping can help keep this source of river contamination in check.



Riparian pasture on the North Fork Crooked WSR is designed to allow grazing while protecting river values.

Manage grazing appropriately: Livestock grazing along your streambank can reduce or eliminate healthy riparian vegetation. Grazing may compact soil and break down the riverbank, adding to erosion problems. Keep your watering activities for livestock away from the riverbank wherever possible. If grazing is allowed near a stream, rotate your livestock into different areas to minimize impact and allow areas to recover.

ACTIONS TO RESTORE BANKS

Provide streamside plantings: Ensure natural, long-term protection of your streambank by planting native trees and shrubs. Their roots will add stability and, over time, introduce large wood into the river. Fencing, changes in grazing practices, or other livestock controls may be needed to protect streamside plants.

Tubed tree plantings to stabilize an eroding bank on the Skagit WSR.



MT BAKER-SNOQUALMIE NATIONAL FOREST

Consider soil bioengineering: Where engineering is appropriate, soil bioengineering—using plants and cuttings together with wood, stone and fabricated mats to stabilize streambanks—is often favored over conventional measures, such as retaining walls and riprapping, for many reasons.

- *Plants deter erosion. Their roots bind the soil, and their vegetation reduces water velocity.*
- *Plants and their roots create a natural water filtration system, helping to improve water quality.*
- *Fish and wildlife habitat is enhanced.*
- *Projects are more natural in appearance.*
- *Maintenance requirements are lower over the long term.*

Soil bioengineering can be as simple as planting willows or as complex as reshaping the bank. Determining which techniques will be successful for you requires a thorough assessment of your river and streambank.

NOVEMBER, 2005



***F**or more information:*

www.nps.gov/rivers/



USDI BUREAU OF LAND MANAGEMENT
www.blm.gov



USDI NATIONAL PARK SERVICE
www.nps.gov



USDI FISH AND WILDLIFE SERVICE
www.fws.gov



USDA FOREST SERVICE
www.fs.fed.us

COVER: *Maurice WSR*, CHRIS BROWN, National Park Service