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Outstandingly Remarkable Values for Wild and Scenic Rivers (with an Emphasis on Oregon)

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Abstract

The Wild and Scenic Rivers Act requires an administering agency to “protect and enhance” the outstandingly remarkable values (ORVs) for which a wild and scenic river was established. It is vital to ensure that the legislative and administrative records adequately document all the pertinent ORVs. Twenty-three commonly accepted general ORVs are compiled here along with 163 distinct specific ORVs mined from various sources for the 69 units of the National Wild and Scenic Rivers System in Oregon, totaling 2,424 miles.

The Wild and Scenic Rivers Act of 1968 (WSRA) requires the agency administering a particular unit of the National Wild and Scenic Rivers System (NWSRS) to fulfill two major responsibilities:

- “protect and enhance” the outstandingly remarkable *values* (ORVs) for which that particular unit of the NWSRS was established; and
- give “primary emphasis” in administration to “protecting its esthetic, scenic, historic, archeologic, and scientific *features*.” [emphasis added]

Other than the prohibition of dams and other water projects, and of future mining on federal public lands, “protect and enhance” is the heart and soul of the WSRA. After inclusion in the NWSRS, the managing agency determines the ORVs of a wild and scenic river (WSR) based on the previous evaluations it may have undertaken prior to designation of the river segment by Congress, the legislative history of the congressional designation, and further evaluation during preparation of the management plan for the new WSR.

It is critical that all the outstandingly remarkable values (ORVs) that caused (or after congressional designation, be identified for) a river segment to be included in the WSR are documented for and/or by the administering agency. This paper examines the language of the WSRA as well as available management plans for all of the Oregon WSRs for evidence as to

what might constitute ORVs worth protecting and enhancing. It offers lists of both general and specific ORVs that might qualify river segments for future protection as part of the NWSRS.

Outstandingly Remarkable Values: Statutory and Specific “Other Similar”

The WSRA begins:

*It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess **outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values**, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. [emphasis added] ([16 U.S.C. 1271](#))*

Following the language of the WSRA, we say that “scenic, recreational, geologic, fish and wildlife, historic, cultural” are the *statutory* ORVs. That leaves “other similar” values, which while mentioned in the statute are not further defined there. All we can glean from the statute is that such values are not scenic, recreational, geologic, fish and wildlife, historic, or cultural—but are nonetheless “similar.” These values are defined elsewhere through practice and application of the WSRA.

Not one of the four federal land management agencies that administer WSRs and add more WSRs to the NWSRS—the USDA’s Forest Service (USFS) or the USDI’s Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NPS)—has established a definitive list of “other similar” (or, in the shorthand of common usage, “other”) ORVs. Implementation of the WSRA by these agencies has produced a rather obscure canon of “other similar” ORVs.

The BLM has—as a matter of formal policy—ventured a guess in the *BLM Manual* as to what some of the “other” ORVs might include. The *BLM Manual* has specified that “other similar” ORVs include (but not be limited to) “hydrologic, ecologic/biologic diversity, paleontologic, botanic, and scientific study opportunities” (old *BLM Manual* 8351) or “ecological, biological or botanical, paleontological, hydrological, traditional cultural uses, water quality, and scientific values” (current [BLM Manual 6400](#)).

Also, the Forest Service has—as a matter of formal policy—ventured a guess in its *Land Management Planning Handbook* ([Forest Service Handbook 1909.12](#)) as to what some of the “other” ORVs might include (but not be limited to): “botanic, hydrologic, paleontologic, scientific, and heritage values” (Chapter 80, section 82.73a).

Commonly accepted general ORVs include

- statutory ORVs,
- agency direction on possible “other similar” ORVs, and
- other often-used ORVs that are neither of the above.

Features

Then there are the “features” of a WSR that must be protected. The WSRA states:

Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.[emphases added] ([16 USC 1281](#))

For a particular component of the NWSRS, such “*features*” may or may not be “outstandingly remarkable *values*.” All “features,” to the degree they exist, must be protected in the administration of a WSR.

“Scenic” and “historic” are named in the statute as both values and features. In the case of several WSRs, “archeologic” and “scientific” features have been found to be outstandingly remarkable (ORVs). However, I’ve not yet found a case of “esthetic” being found to be an ORV.

Perhaps “esthetic” has not been found to be an ORV because *esthetic* is a word that has fallen out of use (hell, we cannot agree on how to spell it: *aesthetic*). This may be because of the tendency of the conservation movement, industry, commerce, and government to make our cases using utilitarian rather than intrinsic arguments (antonyms of *utilitarian* are *decorative* and *attractive*). It is worth comparing the definitions of *scenic* and *esthetic*:

Scenic: “providing or relating to views of impressive or beautiful natural scenery”

Esthetic: “concerned with beauty or the appreciation of beauty”

And since *scenic* is defined by “scenery”:

Scenery: “the natural features of a landscape considered in terms of their appearance, especially when picturesque: *spectacular views of mountain scenery*; the painted background used to represent natural features or other surroundings on a theater stage or movie set” [emphasis in original]

A wildflower-strewn meadow within a WSR can be both scenic from afar and esthetic up close.

ORVs: Bureaucratic and Congressional Findings

Identification of ORVs is critical not only for management of existing WSRs but also because it figures heavily in agency consideration of potential wild and scenic rivers. More and more, it also figures heavily in congressional consideration of such. A little background on the process of designating WSRs as it has evolved through time and as it is experienced by the various stakeholders will clarify why ORV findings matter.

After the eight original WSRs established by the WSRA, most new WSRs were added to the NWSRS by specific Acts of Congress. A relative few came via another path provided for in the WSRA: gubernatorial request for an already state-protected stream. In the early decades, Congress established WSRs that were first formally “studied” by a land management agency at the specific direction of Congress ([16 U.S.C 1276\(a\) & \(b\)](#)). Such studies determined ORVs. Later on, WSRs were often established without having had a full formal congressionally mandated study but as a result of the evaluations the WSRA required the four federal land management agencies to do as part of ongoing planning processes ([16 U.S.C. 1276\(d\)](#)). Most recently, Congress has relied more on the expert testimony of citizens and fact finding by congressional staff to determine ORVs.

Bureaucratic Pre-Designation Findings

Before a WSR is designated by Congress, a bureaucracy (most especially the Bureau of Land Management and the Forest Service) is likely hostile to its establishment. The requisite eligibility and suitability determinations are generally prepared by foresters, range conservationists, or practitioners of similar commodity-focused disciplines that are generally hostile to outstandingly remarkable values.

It is axiomatic: a bureaucracy does not like to have its discretion limited. The WSRA requires the four land management agencies to consider potential WSRs in their planning processes. The designation of a WSR by Congress results in limiting the discretion of the agency. In the cases of the Forest Service and the BLM, this could mean limits on logging, grazing, mining, off-road vehicle use, and other activities the agencies strongly favor.

A Word About “River-Related”

In agency consideration of potential wild and scenic rivers, most agencies insist that an outstandingly remarkable value (ORV) must be “river-related.” The term is not found in the Wild and Scenic Rivers Act but is often found in agency-issued direction, generally to limit the potential ORVs and thus limit potential wild and scenic rivers. Though often applied narrowly, the only official agency definition of “river-related,” offered in [BLM Manual 6400](#), is generally quite broad:

While the spectrum of resources that may be considered is broad, all features considered should be directly river related. That is, they should: (1) be located in the river or on its immediate shorelands (within 1/4 mile on either side of the river), (2) contribute substantially to the functioning of the river ecosystem, and/or (3) owe their location or existence to the presence of the river. [emphasis added]

In considering wild and scenic river designations, US senators and members of Congress are more interested in what citizens think about ORVs associated with a potential wild and scenic river than what the agency thinks.

The result is that formal WSR studies, and “eligibility” and/or “suitability” determinations required in Forest Service and BLM plans, end up recommending few stream segments to

Congress for wild and scenic river protection. Often an agency just ignores most stream segments in its jurisdiction. When it does evaluate a stream segment, it often finds values that while “remarkable” are not outstandingly so. Where the agency does find at least one ORV, thereby deeming the stream “eligible” for designation by Congress, the next bureaucratic step in the evaluation is often that the segment, even though outstandingly remarkable, is not “suitable” (the agency finds that it would not be a good idea for Congress to designate it as a WSR).

The case is different for the National Park Service and the Fish and Wildlife Service. Since their lands already have a strong conservation mandate, a WSR is often not bureaucratically viewed as limiting bureaucratic discretion but rather furthering bureaucratic hopes.

Congressional Findings

The appetite of Congress to establish WSRs is far greater than that of the bureaucracy to recommend them. Therefore, increasingly, as part of the legislative process, Congress is determining not only what “other similar” ORVs are but sometimes also assigning statutory ORVs to particular additions to the NWSRS. ORVs for these NWSRS units can be divined from testimony and other information submitted to Congress, from statements by sponsors of the legislation establishing new or expanded WSRs, from formal “committee reports” that sometimes accompany a bill through the legislative process, and/or from remarks in the *Congressional Record*.

Seek and Ye Shall Find

Previously the Forest Service had found a segment of the Zigzag River to have no ORVs and therefore to be “ineligible” for congressional designation as a wild and scenic river. Nonetheless, Congress established the Zigzag Wild and Scenic River in 2009. A decade later, taking a closer look, the Forest Service found that the Zigzag River is outstandingly remarkable for its scenery (duh) and recreation (double duh) as it flows off the slopes of Mount Hood through the Mount Hood Wilderness. The Forest Service also found another ORV in the “other similar” category of ecological, biological diversity, scientific, and/or wildlife. Specifically: macroinvertebrates. In most particular, Scott’s apatanian caddisfly. The agency noted:

Macroinvertebrate is also an outstandingly remarkable value. There are only nine populations of the Scott’s apatanian caddisfly (Allomyia scotti) known in the entire world, all of which are found on the Mt. Hood National Forest. The habitat for this species is present within the Zigzag River.

Even Congress misses one once in a while.

Bureaucratic Post-Designation Findings

After a WSR is designated by Congress, a bureaucracy is far less hostile to such. The requisite management plan is prepared by the administering agency, but the efforts are often led by resource specialists with an affinity for outstandingly remarkable values.

It’s all about the legislative history. The pre-designation findings of the bureaucracy as to ORVs do not limit Congress, and the post-designation agency ORV findings should at least include the ORVs recognized in the congressional process

General and Specific ORVs, Listed for Handy Reference

Practice has evolved—and is still evolving—to categorize ORVs as either *general* or *specific*. A general ORV is described in one or a few words that can encompass a broad range of specific values. Specific ORVs are more refined as to the particular kind of general ORV or specific to a particular WSR.

General ORVs

All of the statutory ORVs are general ORVs. Through administrative and congressional practice, several other general ORVs have come into common application (Table 1). The list of general ORVs will likely continue to expand. I have included “wildness” as a general ORV not because it has been previously determined to be an ORV but because it should be and it is not captured in the other ORVs.

Table 1: General ORVs for Wild and Scenic Rivers	
archeological (or <i>archeologic</i>)	HYDROLOGICAL (or HYDROLOGIC)
BIOLOGICAL	PALEONTOLOGICAL (or PALEONTOLOGIC)
BIOLOGICAL DIVERSITY	prehistorical (or prehistoric)
botanical (or BOTANIC)	recreational (or recreation)
connectivity	scenic (or scenery)
cultural	<i>SCIENTIFIC</i> (or SCIENTIFIC STUDY)
ECOLOGICAL (or ECOLOGIC)	TRADITIONAL CULTURAL USES
<i>esthetic</i>	WATER QUALITY
fish (or fisheries)	water quantity
geological (or geologic)	wildlife (or fish and wildlife)
HERITAGE	wildness
historical (or <i>historic</i>)	
Bold denotes general ORVs expressly called out in the Wild and Scenic Rivers Act. The remainder encompass the “other similar values” mentioned in the act. (16 USC 1271)	
SMALL CAPS (italicized or not) denotes agency-suggested “other similar” ORVs.	
<i>Italic</i> (bolded or not) denotes the “features” for which “primary emphasis shall be given” by the agency administering the wild and scenic river. (16 USC 1281)	

Specific ORVs

Table 2 is a list of bureaucratic pre-designation, congressional, and bureaucratic post-designation findings of both general and specific ORVs compiled from a survey by the author of all available management plans for Oregon WSRs.

Table 2 is limited to Oregon WSRs because that is what the author is most familiar with and most committed to. However, it is worth noting that as of 2020, Oregon has more units (but not miles) in the NWSRS than any other state. There are 69 units of the NWSRS in Oregon, totaling

2,424 stream miles, representing 31 percent of the individual units and 18 percent of the miles in the national system. Though geographically limited, the sample size of specific ORVs is robust.

Table 2: Specific ORVs Identified for NWSRS Units in Oregon
100-foot waterfall
<i>active glacier</i>
APPLEGATE NATIONAL HISTORIC TRAIL CROSSING
<i>aspect and gradient</i>
<i>Barlow Road</i>
<i>bog communities and stiff club moss</i>
botanic/botany
botany
camping
CAMPING AND FISHING
CLEAN COLD WATER THAT SUPPORTS MAINSTEM NATIVE FISHERY VALUES
CLEAN COLD WATER THAT SUPPORTS WILD SALMON AND WILD STEELHEAD
core population of bull trout
CRITICAL HABITAT FOR WILD SPRING CHINOOK SALMON AND WILD WINTER STEELHEAD, [AND] NATIVE RESIDENT CUTTHROAT TROUT
critical travel (migration) corridor for deer and elk between winter and calving seasons
cultural
cultural–prehistory
cultural–traditional use
DACE
<i>dark soiled bogs and “genus communities” of grape ferns</i>
DEL NORTE SALAMANDER
DIVERSE VIEWS DUE TO DIVERSE VEGETATION AND GEOLOGY
<i>diversity of threatened, endangered, and sensitive species</i>
ecologic/biologic diversity
ecology
ecology/botany
ENDEMIC SNAIL SPECIES
equestrian trail use along the river, especially as an easy trail
EXCELLENT CRAYFISH, BEAVER, AND NATIVE CUTTHROAT TROUT HABITAT
exceptional wild trout fisheries
expert whitewater kayaking
fish
fish habitat and populations
fisheries
fishing
FIVE IDENTIFIED CULTURAL SITES, VIEWS OF CLIFFS, MOSS-COVERED BOULDERS, AND DIVERSE STREAM-SIDE VEGETATION
full suite of native [fish] species
<i>fumarole field</i>
<i>genetically isolated redband rainbow trout</i>
geologic

geology/hydrology//geologic/hydrologic//geohydrologic
<i>ghost forests</i>
<i>glacial valley floodplain</i>
<i>glacially carved valley</i>
glaciated canyons
<i>graveyard butte</i>
HABITAT FOR SOUTHERN OREGON–NORTHERN CALIFORNIA (SONCC) WILD COHO
habitat for the harlequin duck
HABITAT FOR THREATENED MARBLED MURRELETS
<i>harlequin duck habitat</i>
HIGH CONCENTRATION OF ROUGH-SKINNED NEWTS IN WASSON LAKE
HIGH-QUALITY HABITAT FOR BALD EAGLE, NORTHERN SPOTTED OWL, RED TREE VOLE, MARBLED MURRELET, AND COASTAL GIANT SALAMANDER
highly memorable and impressive canyon views
highly memorable and photographic [scenery]
HIGHLY RATED SCENERY INCLUDES GORGEOUS RIVER
hiking
historical/historic
HORSEBACK RIDING
hunting
hydrologic
INTACT MATURE AND OLD-GROWTH FOREST HABITAT
INTACT WILLOW RIPARIAN HABITAT
JENNY CREEK SUCKER
<i>kayaking</i>
KAYAKING, FISHING, [AND] HIKING
<i>Keeps Mill</i>
<i>Keeps Mill overlook</i>
LAMPREY
large, deep-seated earthflows that are very active
LARGEST AND ONE OF THE FEW NATURAL POPULATIONS OF NELSON’S CHECKERMALLOW IN THE OREGON COAST RANGE
low-impact recreation opportunities
macroinvertebrates
MATURE AND OLD-GROWTH FOREST HABITAT
MATURE AND OLD-GROWTH FORESTS
MATURE AND OLD-GROWTH FORESTS SUCH AS PORT ORFORD CEDAR, BREWER’S SPRUCE, SADLER’S OAK, [AND] SIERRA LAUREL
MATURE FOREST SCENIC VALUES
MATURE FORESTS
MOUNTAIN BIKING
Native American cultural use
NATIVE CUTTHROAT TROUT
NATIVE REDBAND TROUT
NATIVE RESIDENT RAINBOW AND NATIVE CUTTHROAT TROUT, WILD WINTER STEELHEAD
natural values

<i>nature and wildlife observation</i>
nature study
<i>Nordic skiing</i>
NORTHERN PACIFIC POND TURTLE
<i>northern spotted owl habitat</i>
<i>Old Maid age pyroclastic flows and mudflow deposits</i>
<u>old-growth trees along the river</u>
OLDER FOREST SCENERY
ONLY KNOWN BREEDING SITE IN OREGON COAST RANGE FOR HARLEQUIN DUCKS
other similar
outstanding whitewater boating
paleontologic
<u>Parkdale lava flow</u>
PART OF THE LARGEST OREGON COAST RANGE LOW ELEVATION MATURE AND OLD-GROWTH RAINFOREST
<i>peregrine falcon habitat</i>
<i>photography</i>
<i>plant community diversity</i>
PORT ORFORD CEDAR
POSSIBLE DWARF WESTERN PEARL SHELL MUSSEL
<i>potential research natural area</i>
prehistory/prehistoric
premier steelhead and trout fisheries
<u>quality habitat for cold water corydalis</u>
recreational/recreation
riparian
<i>river color</i>
ROGUE RIVER NATIONAL RECREATION TRAIL
ROGUE RIVER STONECROP
ROOSEVELT ELK WINTER RANGE
<i>rugged hiking and backpacking</i>
SCENIC VIEWS OF THE LAKESHORE AND BEYOND
scenic/scenery
scientific study opportunities
<u>Scott's apatanian caddisfly (<i>Allomyia scotti</i>)</u>
SCULPINS
<i>sightseeing</i>
<i>solitude opportunities</i>
<u>South Fork Water Board pipeline and associated features (decommissioned in 1985)</u>
species diversity
swimming
threatened and endangered species
threatened and endangered species habitat
THREE EPA LEVEL IV ECOREGIONS CONVERGE
<u>Timberline Trail and Pacific Crest Trail</u>
traditional cultural use

traditional value/lifestyles adaptation
trout fishing
<u>[truly wild] mid-Columbia steelhead</u>
<i>Tygh Valley milkvetch</i>
unique and challenging experience for kayakers
UNIQUE COLUMNAR BASALT ROSETTE FORMATION
unique ecosystems
<u>unique whitewater opportunities</u>
<i>unusual extensions of species beyond normal range</i>
vegetation
vegetative communities
VERY HIGH PRODUCING WILD STEELHEAD STREAM
VIEW OF AND FROM THE ROGUE RIVER CANYON, AND THE ROGUE RIVER NATIONAL RECREATIONAL TRAIL
VIEWS FROM THE UMPQUA RIVER LOOKING UP THE WATERSHED
<i>views from Timberline Lodge and lower parking area, Highway 35, Timberline Trail, White River sno-park of the river</i>
<i>views of Bonnie Butte and Mount Hood from the river</i>
<u>violet suksdorfia</u>
water quality and quantity
WATERFALL
whitewater boating
WILD CHINOOK SALMON
WILD CHUM SALMON
WILD COHO SALMON
WILD COHO SALMON, WILD WINTER STEELHEAD, WILD FALL CHINOOK SALMON, AND LAMPREY
WILD FALL CHINOOK
WILD WINTER AND WILD SUMMER STEELHEAD
WILD WINTER STEELHEAD
WILD WINTER STEELHEAD, WILD COHO SALMON, AND WILD FALL CHINOOK SALMON
wilderness
wildlife
<u>[wildlife] diversity due to the elevation changes within the corridor and creek itself</u>
wildlife habitat
wildlife habitat and populations
WINTER AND SUMMER STEELHEAD
WINTER STEELHEAD
Bold entries are “statutory” outstandingly remarkable values called out in the Wild and Scenic Rivers Act of 1968 as amended.
Plain (roman) entries were compiled from a quick review of the webpage for each current wild and scenic river in Oregon and a quick scan of each wild and scenic river management plan, if available, from that site or other agency documents (N=32).
<i>Italic</i> entries are specific to the White Wild and Scenic River and are adapted from Table 3.1, White River National Wild and Scenic River Environmental Assessment (ca. 1993), jointly prepared by the USDA Forest Service and USDI Bureau of Land Management. It is the most detailed listing of outstandingly remarkable values by any agency that the author has come across.
SMALL CAP entries are specific ORVs noted by Senator Wyden in the September 11, 2019, Congressional Record .
<u>Underlined</u> entries are specific ORVs noted in River Values Report for Nine Wild and Scenic Rivers on Mt. Hood National Forest ” (April 2019).

One particularly outstandingly remarkable management plan is that for the White WSR, which arises from a glacier on Mount Hood and empties into the Deschutes River. The White River WSR management plan was jointly prepared by the Forest Service and the BLM and is an excellent example of documenting specific ORVs. The highly specific White WSR ORVs are in *italics* in Table 2.

Equally remarkable are the specific ORVs that Senator Ron Wyden (D-OR), a champion of the Wild and Scenic Rivers Act, detailed in the *Congressional Record* for several WSRs established or expanded in 2019. The specific Wyden-described ORVs are shown in SMALL CAPS in Table 2.

Finally, Table 2 lists specific ORVs identified by the Forest Service in a document entitled “[River Values Report for Nine Wild and Scenic Rivers on Mt. Hood National Forest](#)” (April 2019) for wild and scenic rivers established or expanded in 2009. Those particular specific ORVs are underlined.

A Closer Look at the General ORVs

While ORVs can be categorized as either general or specific, there can in fact be overlap between general ORVs (for example: biological, biological diversity, ecological, and scientific). In choosing which general ORV(s) to ascribe to a wild and scenic river, first list the specific ORV(s). In most cases, the general ORV(s) will fall into place. Table 3 lists dictionary definitions for each general ORV and commentary relevant to the application of the Wild and Scenic Rivers Act. Many general ORVs are adjectives, while some are nouns. In Table 3, where the ORV is an adjective, the corresponding noun is also defined.

Table 3. Definitions of and Commentary on General ORVs Pursuant to the WSRA	
Selected Definitions*	Relevant Commentary
<p>ARCHEOLOGIC or ARCHEOLOGICAL: relating to archaeology</p> <p>ARCHELOGY: the scientific study of material remains (such as tools, pottery, jewelry, stone walls, and monuments) of past human life and activities</p>	<p><i>Archeological</i> is about the material remains left by humans. See <i>paleontological</i>.</p>
<p>BIOLOGICAL: of or relating to biology or to life and living processes</p> <p>BIOLOGY: a branch of knowledge that deals with living organisms and vital processes; the plant and animal life of a region or environment; the life processes especially of an organism or group; broadly: ECOLOGY</p>	<p>See <i>biological diversity</i> and <i>ecological</i>.</p>
<p>BIOLOGICAL DIVERSITY (or BIODIVERSITY): the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes</p>	<p>A long wild and scenic river can have outstandingly remarkable biological diversity because it flows through several ecosystems, and/or because of high species diversity in its immediate environment or within the stream itself</p>

diversity within species, between species and of ecosystems **	(for example, multiple taxa of fish). See <i>ecological</i> and <i>scientific</i> .
BOTANICAL (or BOTANIC): of or relating to plants or botany BOTANY: a branch of biology dealing with plant life	<i>Botanical</i> refers to plant life. See <i>wildlife</i> .
CONNECTIVITY: the quality, state, or capability of being connective or connected “‘Connectivity’ can be broken down into ‘structural connectivity’ and ‘functional connectivity.’ <i>Structural connectivity</i> refers to the physical relationship between landscape elements whereas <i>functional connectivity</i> describes the degree to which landscapes actually facilitate or impede the movement of organisms and processes . Functional connectivity is a product of both landscape structure and the response of organisms and processes to this structure. Thus, functional connectivity is both species- and landscape-specific. Distinguishing between these two types of connectivity is important because structural connectivity does not imply functional connectivity. In general, when we use the term ‘connectivity’ we are using the functional definition.” *** [emphases in original]	Streams and their immediate environments are inherently connective. Stream corridors facilitate migration of species from higher to lower elevations. A network of several stream corridors can be outstandingly remarkable. A long stream corridor that arises from a mountain glacier and flows through forests and finally into a desert can be outstandingly remarkable.
CULTURAL: of or relating to culture CULTURE: the customary beliefs, social forms, and material traits of a racial, religious, or social group; the set of shared attitudes, values, goals, and practices that characterizes an institution or organization; the set of values, conventions, or social practices associated with a particular field, activity, or societal characteristic; the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations	<i>Culture</i> is what we, or a subset of humans, are. See <i>heritage</i> .
ECOLOGICAL (or ECOLOGIC): of or relating to the science of ecology; of or relating to the environments of living things or to the relationships between living things and their environments ECOLOGY: a branch of science concerned with the interrelationship of organisms and their environments; the totality or pattern of relations between organisms and their environment	See <i>biological</i> , <i>biological diversity</i> , and <i>scientific</i> .
ESTHETIC: of, relating to, or dealing with aesthetics or the beautiful; ARTISTIC; pleasing in appearance: ATTRACTIVE	(An equally acceptable spelling is <i>aesthetic</i> .) An individual wildflower is esthetic, but not scenic. A meadow of

	wildflowers can be both esthetic and scenic. See <i>scenic</i> .
<p>FISH: any of numerous cold-blooded strictly aquatic craniate vertebrates that include the bony fishes and usually the cartilaginous and jawless fishes and that have typically an elongated somewhat spindle-shaped body terminating in a broad caudal fin, limbs in the form of fins when present at all, and a 2-chambered heart by which blood is sent through thoracic gills to be oxygenated</p> <p>FISHERIES: the occupation, industry, or season of taking fish or other sea animals (such as sponges, shrimp, or seals): FISHING; a place for catching fish or taking other sea animals; a fishing establishment, <i>also</i>: its fishermen; the legal right to take fish at a particular place or in particular waters; the technology of fishery—usually used in plural</p>	<p>Technically, fish can be a subset of wildlife. The Wild and Scenic Rivers Act states the outstandingly remarkable value as “fish and wildlife”; however, in practice, they are separate ORVs. The outstandingly remarkable value can be the fish themselves, or fishing for the fish, and/or the bounty of the fish. See <i>wildlife</i>.</p>
<p>GEOLOGICAL (or GEOLOGIC): of, relating to, or based on geology</p> <p>GEOLOGY: a science that deals with the history of the earth and its life especially as recorded in rocks</p>	<p>A dramatic river canyon can be outstanding both as hydrology and as geology, as can an underground stream flowing through limestone. A lake created by a lava flow across a stream is a geologic feature. A lake that has an extraordinary pH is a hydrologic feature. See <i>hydrological</i>.</p>
<p>HERITAGE: something transmitted by or acquired from a predecessor: LEGACY, INHERITANCE; TRADITION; something possessed as a result of one’s natural situation or birth: BIRTHRIGHT</p>	<p><i>Heritage</i> is something we receive from earlier humans. See <i>culture</i>.</p>
<p>HISTORICAL (or HISTORIC): famous or important in history; having great and lasting importance; known or established in the past; dating from or preserved from a past time or culture</p> <p>HISTORY: TALE, STORY; a chronological record of significant events (such as those affecting a nation or institution) often including an explanation of their causes; an established record; a branch of knowledge that records and explains past events; events that form the subject matter of a history; events of the past</p>	<p>If the event happened after a society could write about it, it is historical. See <i>prehistoric</i>.</p>

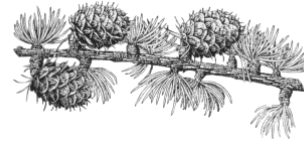
<p>HYDROLOGICAL (or HYDROLOGIC): of, relating to, or based on hydrology</p> <p>HYDROLOGY: a science dealing with the properties, distribution, and circulation of water on and below the earth's surface and in the atmosphere</p>	<p>Hydrology (the action of water) can affect geology and vice versa. A dramatic river canyon can be outstanding both hydrologically and geologically, as can an underground stream flowing through limestone. A lake that has an extraordinary pH is a hydrologic feature. See <i>geological</i>.</p>
<p>PALEONTOLOGICAL (or PALEONTOLOGIC): of, relating to, or based on paleontology</p> <p>PALEONTOLOGY: a science dealing with the life of past geological periods as known from fossil remains</p>	<p><i>Paleontological</i> is about fossils remains. See <i>archeology</i>.</p>
<p>PREHISTORICAL (or PREHISTORIC): of, relating to, or based on prehistory</p> <p>PREHISTORY: of, relating to, or existing in times antedating written history</p>	<p>If the event happened before a society could write about it, it is prehistorical. See <i>historic</i>.</p>
<p>RECREATIONAL: of, relating to, or characteristic of recreation</p> <p>RECREATION: refreshment of strength and spirits after work; also, a means of refreshment or diversion: HOBBY</p>	
<p>SCENIC: of or relating to natural scenery</p> <p>SCENERY: a picturesque view or landscape</p>	<p>A meadow of wildflowers can be both esthetic and scenic. The Manhattan skyline is impressive but not scenic, in that it is not natural. See <i>esthetic</i>.</p>
<p>SCIENTIFIC: of, relating to, or exhibiting the methods or principles of science</p> <p>SCIENCE: such knowledge or such a system of knowledge concerned with the physical world and its phenomena: NATURAL SCIENCE</p>	<p>A stream segment—or values or features in its immediate environment—can contribute in an outstandingly remarkable way to science, as being an area for field research and the like. See <i>biological diversity</i> and <i>ecological</i>.</p>
<p>TRADITIONAL CULTURAL USES</p> <p>TRADITIONAL: handed down from age to age; following or conforming to tradition: adhering to past practices or established conventions</p>	<p>See <i>cultural</i>.</p>
<p>QUALITY: peculiar and essential character; an inherent feature; CAPACITY, ROLE; degree of excellence; superiority in kind; a distinguishing attribute</p> <p>WATER QUALITY: refers to the physical, chemical, biological and organoleptic (taste-related) properties of water. ****</p>	<p>Outstandingly remarkable water quality could range from extraordinarily good (pure/clean/pristine) to extraordinarily bad. In the case of wild and scenic rivers, the emphasis is on the extraordinarily good. See <i>water quantity</i>.</p>

<p>QUANTITY: an indefinite amount or number; a determinate or estimated amount; total amount or number; a considerable amount or number—often used in plural</p> <p>WATER QUANTITY: Water quantity means the amount of water that is present in a river, lake, wetland or aquifer at a particular point in time. Water quantity varies naturally in water bodies due to climate, land cover, and underlying geology. Natural variability in water flows and levels is important for the health of aquatic ecosystems and many of the services that they provide (for example, fisheries). *****</p>	<p>Outstandingly remarkable water quantity can range from a very large amount of water to a very small amount of water. For example, a tributary stream may contribute an outstandingly remarkable amount of the flow to the stream it flows into. Alternatively, a stream, albeit merely a trickle, could be outstandingly remarkable in a desert environment. See <i>water quality</i>.</p>
<p>WILDLIFE: living things and especially mammals, birds, and fishes that are neither human nor domesticated</p>	<p>While fish is a subset of wildlife, fish are a separate outstandingly remarkable value. See <i>fish</i>.</p>
<p>WILDNESS: the character of being uncultivated, undomesticated, or inhospitable *****</p> <p>WILD: a sparsely inhabited or uncultivated region or tract; WILDERNESS; a wild, free, or natural state or existence; without regulation or control; living in a state of nature and not ordinarily tame or domesticated; growing or produced without human aid or care; of or relating to wild organisms (the wild state); not inhabited or cultivated (wild land); not amenable to human habitation or cultivation; not subject to restraint or regulation; characteristic of, appropriate to, or expressive of wilderness, wildlife, or a simple or uncivilized society</p>	<p>Wildness can encompass, but is not limited to, roadlessness, unroaded, natural, primitive, generally natural, wilderness (designated or de facto), unpolluted, or pristine.</p> <p>By definition, “wild”-classified segments of wild and scenic rivers “represent vestiges of primitive America.”</p>
<p>* Unless otherwise specified, definitions are from Merriam-Webster Dictionary.</p>	
<p>** From the Convention on Biological Diversity.</p>	
<p>*** From Katie Meiklejohn, Rob Ament, and Gary Tabor (undated), Habitat Corridors & Landscape Connectivity: Clarifying the Terminology. Center for Large Landscape Conservation.</p>	
<p>**** From the Organisation for Economic Co-operation and Development Glossary of Statistical Terms.</p>	
<p>***** From the Northland Regional Council, New Zealand.</p>	
<p>***** From Lexico.com (powered by Oxford University).</p>	

Conclusion

Outstandingly remarkable values can be determined through federal land management agency evaluations and through citizen advocacy during the legislative process. These determinations become part of the legislative history of the congressional statute that places the new wild and scenic river into the National Wild and Scenic Rivers System. In the end, an ORV is anything that the administering agency accepts in developing the requisite management plan for a component of the NWSRS. Where Congress has spoken on, or relied on evidence of, either general or specific ORVs for particular system components, an agency should give full weight to the congressional findings. If it does not, it will seem to be acting in an arbitrary and capricious manner.

Larch Occasional Papers



The Larch Company has occasionally issued papers on a variety of topics:

#	Year	Title
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22.1	2017	National Heritage Areas: Combining the Conservation of Nature, History, and Culture with Local Economic Development
21	2015	National What-Have-You Areas: Congressional Conservation of Our Public Lands
20.5	2015	21st-Century National Recreation Areas for Oregon's National Forests and BLM Public Lands
19	2013	Oregon Softwood Lumber Industry 1995-2012: Fewer Mills and Jobs, But Larger Timber-Processing Capacity
18	2012	Oregon Private Timberland Owners Not Paying Fair Share of Federal Income Taxes
17	2012	Oregon Private Timberland Owners Not Paying Enough State Timber Taxes
16	2012	Oregon Private Timberland Owners Not Paying Fair Share of County Property Taxes
15	2012	Native American Tribal Lands and Federal Public Forestlands in Oregon
14	2012	An Overview of Land Management Categories for Oregon Federal Public Lands Under the Northwest Forest Plan
13.8	2019	National Wild and Scenic Rivers and State Scenic Waterways in Oregon
12	2012	Special Congressional Conservation Designations in Oregon
11.2	2020	The National Wilderness Preservation System in Oregon: Making it Bigger and Better
10	2012	Oregon and Washington Raw Log Exports: Exporting Jobs and a Subsidy to Domestic Mills
9	2012	Pacific Northwest Offshore Oil and Gas Potential: At Best About A Month's National Supply; At Worse An Unnatural Disaster
8	2011	"Small" Wilderness: No Big Deal
7	2011	Overlapping Wilderness and Wild & Scenic River Designations Provide Optimal Conservation Protection for Federal Public Lands(co-authored with Mark Salvo)
6	2008	Establishing a System of and a Service for U.S. Deserts and Grasslands (co authored w/ Mark Salvo)
5	2007	Eliminating Forest Service Regional Offices: Replacing Middle Management with More On-the-Ground Restoration
4	2007	Forest Service Administrative Appeals: A Misallocation of Resources
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