

## PORTLAND COMMENTS ON 4(d) RULES

The City of Portland, Oregon, (The City) submits the following comments on the proposed 4(d) rules for various stocks of northwest chinook salmon and steelhead trout. The City is Oregon's largest municipality. It sits at the confluence of two major salmon and steelhead rivers, the Columbia and Willamette, and draws its primary water supply from the Bull Run River, a tributary to the Sandy River. The Sandy River also provides important salmon and steelhead habitat.

Portland and its citizens understand that the quality of life and the economic health of our community are directly related to the protection and proper stewardship of our natural resources. The City is officially committed to develop and cultivate a sustainable future for its community and to manage wisely the resources upon which its environmental, social, and economic health rely.

The listing of salmon and steelhead as threatened under the federal Endangered Species Act (ESA) is the most recent and dramatic evidence that the Pacific Northwest has been managing its natural resources in an unsustainable manner. It will not be easy to change course. But the Portland City Council has committed that Portland "will work, to the best of its ability, through regulatory compliance, creation of incentives, and otherwise, to support the recovery of [fish] . . . populations." The Council further has declared its intent to cooperate with other local governments "to develop a regional steelhead recovery plan that is consistent with regional growth management and livability policies." City of Portland City Council [Resolution No. 35715](#) (June 18, 1998).

It is within this context that the City comments upon the draft 4(d) rules for Lower Columbia steelhead and chinook and Upper Willamette chinook. Where the City is critical or asks for changes, it is not because the City opposes efforts to restore steelhead and salmon. Instead the City believes that changes to the proposal would help accomplish that goal. Our comments consider not just the technical aspects of fish protection, but the strategic and political implications of the rule as well. For better or worse, success of any restoration efforts will depend on a cooperative commitment among governments at all levels and the citizens and businesses that the governments represent. The rules must, therefore, not only lay out how to protect fish; they must also provide both incentives and mechanisms for vital government-citizen cooperation.

The City commends NMFS for providing ESA compliance options in the form of 4(d) limitations on the take prohibition. We also want to make clear that the City considers the draft 4(d) rule to be just one of several ESA compliance options. Our overall strategy will be to develop a comprehensive compliance plan for Portland that will contribute significant measures for inclusion in the NMFS recovery plans for the Lower Columbia and the Upper Willamette ESUs. Gaining NMFS approval of City programs under the limitations in the 4(d) rule will be only a portion of this city-wide compliance strategy.

### **A. APPLICATION OF THE TAKE PROHIBITION TO STEELHEAD AND CHINOOK**

Implementation of the take prohibition is a necessary and important step toward the goal of protecting and recovering ESA-listed fish. We acknowledge, however, that this decision will complicate the lives of our citizens and make many of Portland's governmental decisions and actions more difficult and more costly. The City is committed to working with NMFS collaboratively to accomplish recovery goals consistent with regional growth management and livability policies.

### **B. INCORPORATION OF THE [PORTLAND PARK'S INTEGRATED PEST MANAGEMENT](#) AS A 4(d) LIMITATION**

Portland is pleased that NMFS has recognized the fish protective nature of our Parks Bureau's integrated pest management program - Proposed Limitation (11). We request, however, that the rules be amended to allow other City bureaus and other jurisdictions to make use of the limitation if they agree to adopt a similar program. We believe this will provide an incentive for local agencies to improve pest management practices, similar to the incentive NMFS has provided for others to adopt practices similar to the road maintenance program of the Oregon Department of Transportation.

### **C. LIMITATION ALLOWING HABITAT RESTORATION ACTIVITIES**

#### **1. GENERAL APPROACH**

The City of Portland is involved in habitat restoration projects in numerous watersheds. In many cases, our work is in partnership with voluntary [local watershed councils](#), for which Oregon is nationally known. We also have an extensive [restoration program](#) funded through the [Bureau of Environmental Services](#).

The City understands NMFS' concern that habitat restoration activities should be scientifically valid and integrated into larger watershed plans. Nonetheless, we also worry that the rule establishes standards that may discourage local activities that engage local citizens in the fish restoration effort. No one doubts the value of proceeding with only those restoration activities that can pass scientific muster. On the other hand it will not aid the long-term state of our fish runs if rules are so strict that they dampen the commitment and enthusiasm of local watershed councils.

For instance, requiring written approval at both the state and federal level for all "watershed conservation plans" may pose a very high administrative burden. Oregon has more than 1000 fifth order watersheds, the level at which much watershed planning is conducted. Even if it might be theoretically possible to approve plans at a larger basin scale, we are concerned that neither NMFS nor the State of Oregon have the resources to accomplish the task expeditiously. Given legitimate concerns by volunteer councils that their projects not result in ESA legal liability, we are also concerned the plan approval process in the draft 4(d) rule unreasonably discourage locally-initiated projects to improve stream channel conditions.

Further, very few of the watershed assessments completed in Oregon so far could meet all ten of the assessment standards contained in the proposed rules. Assessments are, in practical terms, evolving products. They increase in sophistication over time based on the resources available and the location-specific knowledge obtained. We believe this is true of assessments done by local and state government as well as those performed by voluntary watershed councils. The assessment protocols are still relatively new and are still evolving. This is particularly true in low-elevation, low-gradient urban areas, where relevant watershed assessment guidelines are still in their infancy. We accept the ten standards as legitimate goals, but we question the realism of applying the standards broadly across the region within two years.

More specifically, watershed councils may also have difficulty meeting expectations that “require state, local government or other responsible entity to monitor, minimize and mitigate the impacts ...” or “assure that the safeguards required in watershed conservation plans will be funded and implemented.” Grant-funded watershed councils cannot provide these assurances. Partnerships between the councils and local governments to provide these assurances take time, and may not be achievable across the region within two years.

Finally, given the resources available to most watershed councils, it is not realistic to expect that “watershed conservation plans” as described in the draft rule will be completed in two years. This concern is exacerbated by the fact that the State of Oregon’s watershed planning guidelines are not yet approved by NMFS. Again, the City wants to be able to work collaboratively with watershed councils to develop and implement plans to improve habitat. We seek assistance from NMFS to minimize the administrative burden and to avoid arbitrary time constraints.

There is no easy answer, as far as we can see, to the conflict between the need for scientific validity and the need to encourage and reward local watershed improvement efforts. One option might be to extend the time for “early action” habitat restoration activities for longer than two years. Alternatively, NMFS could announce that the list of acceptable activities will be reviewed and may be extended at the end of the two-year period. We encourage and recommend that NMFS incorporate some flexibility into the rules so as not to discourage local enthusiasm and commitment to watershed improvements.

## 2. SPECIFIC HABITAT RESTORATION CRITERIA

The City understands NMFS desire to approve a 4(d) limitation only for projects that will not harm fish. On the other hand, some of the absolute criteria outlined in the rule could mean that fish restoration projects would not proceed under protection of the rule. We are aware that such flexibility risks error or abuse, but without it, this work could be very difficult to accomplish, and the incentive or protection provided by this limitation could be moot. For instance:

**(1) Riparian Planting or Fencing.** The conditions for riparian zone planting or fencing are too restrictive to allow beneficial construction/planting activities in certain streams. The strict prohibition on in-water work should be eliminated. Instead, specific low-impact construction activities such as foot access, supply transfers by foot, and the like should be allowed in the stream channel during any state in-water work season guidelines established for fish protection. NMFS may also wish to allow certain construction activities outside those work windows if specifically approved by NMFS and/or the states. We also suggest programmatic approval of best management practices for erosion control.

**(2) Heavy Equipment.** A prohibition on heavy equipment in the stream channel will make it extremely difficult to accomplish placement of large wood or boulders. Low-impact heavy equipment (e.g., spider hoes, rubber-tired machinery, etc.) should be allowed where necessary to place large wood or other bulky or heavy structural elements in streams.

**(3) Road Repair.** We do not believe it is possible to repair, maintain, upgrade or decommission roads in danger of failure and at the same time prevent all sediment from reaching the stream. The habitat restoration activity should be designed to avoid increases in the background sediment/turbidity level and should be done using best management practices for erosion control.

## D. ROAD MAINTENANCE UNDER OREGON TRANSPORTATION STANDARDS

The City appreciates the opportunity to come within the “limitation” allowed for road maintenance according to [Oregon Department of Transportation standards](#). The City is confident that it can meet the principles and objectives reflected in those standards, and intends to proceed in that direction. We want to point out, however, that the ODOT standards apply primarily to highways or rural roads, whereas the City must maintain roads in a dense urban setting. The City urges NMFS, therefore, to acknowledge in the final rule that the individual memoranda of agreement between local jurisdictions and NMFS can be used to tailor the ODOT standards specifically to the particular circumstances faced by each jurisdiction.

## E. LIMITATION FOR CERTAIN URBAN DEVELOPMENT ACTIVITIES

### 1. GENERAL COMMENTS

As a general matter, the City supports and expects to use its own governmental authorities to help address the twelve “urban development” principles identified in the proposed rule. We interpret the rule to mean that those twelve principles should guide urban development, be it new development in previously undeveloped areas (urban reserves) or redevelopment in the urban core. So interpreted, however, the rule immediately begs the question of how one can apply the principles to redevelopment sites surrounded by existing urban conditions. For instance, how does one endeavor to “protect historic stream meander patterns” at one site on the

Willamette River, when the surrounding land is built on fill and the channel adjacent to the site is contained within concrete seawalls? This question and others like it are sharpened by reading the rules' "preamble," in which NMFS interprets the twelve principles to focus on very specific and prescriptive standards for buffers, type of vegetation, and acceptable activities.

The City understands that strategically placed restoration work is necessary to provide functional habitat similar to that historically created by stream meander and riparian processes. However, blanket prescriptions that attempt to restore all historic stream channel meander/migration patterns, or all riparian areas, may be virtually impossible in the urban core. Such efforts also may run contrary to the watershed-oriented restoration strategy described elsewhere in the proposed rules. There is a danger that inflexible application of the 12 principles, or application of the 12 principles on a site-by-site basis, could force jurisdictions to spend valuable time and funds on sites that may not be the most likely to return fish habitat benefits.

Other unintended consequences may arise in several ways. For instance, a primary objective of Metro's Urban [Growth Management](#) Functional Plan is to encourage density in already developed areas and reduce the incentives for sprawl onto undeveloped land and the associated negative impacts on habitat. Situations may arise in which specific efforts to restore fish habitat in the developed core of the region could be outweighed by the risk of exacerbating the detrimental effects of sprawl. NMFS should consider the benefits of sprawl avoidance when evaluating the adequacy of local ordinances. Similarly, in already developed areas, rules and standards must be sensitive to the need to maintain the economic incentives for redevelopment. In many instances, redevelopment is the only way to clean up contaminated brownfields and to improve fish habitat conditions. Without the redevelopment, in other words, degraded fish habitat will persist with no improvement. With the redevelopment and with clear guidance from watershed level planning, fish habitat can be addressed as part of the redevelopment effort.

The rule can and should be read to connect the 12 principles to the kind of strategic watershed-wide restoration analysis discussed elsewhere in the rule. The City interprets the rule to allow, and seeks NMFS confirmation that the rule allows, local governments to apply the principles in several ways.

**(1)** First, in the Portland metropolitan area, if NMFS ultimately accepts the Metro Functional Plan for purposes of 4(d) limitations on take prohibitions, a local jurisdiction may adopt rules and regulations consistent with Metro standards and fit within the 4(d) limitation.

**(2)** Assuming that the Metro plan in final form reflects the current drafts, local governments may act "consistent" with the plan in various ways. One is simply to adopt uniformly applicable general regulations that meet Metro's specific and prescriptive "safe harbor" rules. Second, Metro's "local riparian district" option would allow local jurisdictions to develop development plans that do not necessarily apply the "cookie cutter" safe harbor rules to each parcel of land. Instead the local jurisdictions could create an overall plan aimed at preserving "properly functioning habitat" in new development areas and improving conditions in areas where habitat is already degraded. In Portland's built-up environment, this is most likely the route the City will have to pursue.

**(3)** Further, irrespective of the local jurisdiction's compliance with Metro, local jurisdictions must be able to develop their own standards and rules for "urban development" for submission to NMFS for review and approval under the rule's principles. It is vitally important, in the City's view, that Metro's Functional Plan not be isolated as the only 4(d) compliance route for Portland area jurisdictions. Neither should the terms of this rule foreclose the option of seeking an amended or supplemental 4(d) rule that would work better in a particular situation. For instance, the City has been working with NMFS for some time on its stormwater, erosion control, and environmental zoning programs. Our expectation is that we retain the option to gain NMFS approval for those programs even if they are not part of the City's response to Metro's Functional Plan or if the programs are complete before NMFS is able to review and approve the Functional Plan. This route is similar to what we understand NMFS has discussed with the Puget Sound region. Reference to the Metro plan also should not be interpreted to mean that jurisdictions must forgo other ESA compliance mechanisms available through Section 7 and Section 10.

As NMFS knows, the City of Portland has long been a supporter of Metro's urban growth planning efforts and expects to continue to work with Metro. Nonetheless, local jurisdictions will be most encouraged to work toward fish friendly policies when they have several legal and administrative options for accomplishing that goal.

**(4)** NMFS must not expect that all, or even most, urban development "ordinances" will consist of blanket standards uniformly applied. In some cases, particularly when managing the urbanization of essentially undeveloped lands, that may be possible. But such general approaches probably will be hard to fit in areas that are already densely developed. The City expects and hopes to use its expertise in special "district" planning and zoning to create comprehensive approaches to fish habitat preservation and improvement in selected geographic areas. Such district zoning would allow the City to improve conditions overall and strive to restore elements of properly functioning conditions within a "district," even if pre-existing development has constrained the potential for such conditions to exist at each parcel in the district.

**(5)** Finally, NMFS must recognize that improvement in regulatory mechanisms, just like improvement of fish habitat itself, must often be incremental. In that respect, the rule must be written and interpreted to encourage local jurisdictions to come forward with programs that help fish, even if the programs do not "comprehensively" address all principles at once. Otherwise, real progress may be delayed waiting for the slowest (probably the most contentious) elements. Perhaps the most obvious example of this arises in the context of stormwater. The City is engaged in a massive and expensive effort to reduce the impacts of [urban stormwater](#) runoff. That effort is not, per se, part of the City's "urban development" planning and zoning; it is conducted by a separate agency, with a different timetable. The City intends to move its stormwater control program forward as quickly as possible and not hold it back while, for instance, the City works to develop a Willamette River "local riparian plan." The City expects to bring individual programs forward that will address elements of the 12 urban development principles. We do not expect that a single program or ordinance will accomplish compliance with all 12 principles.

The City hopes NMFS intended that its proposed rules could incorporate these five general approaches. If that was not NMFS' original intent, then the City urges amendments to accomplish our stated objectives.

## **2. COMMENTS ON SPECIFIC RULE AND PREAMBLE LANGUAGE**

In addition to these general concerns, the City has certain specific suggestions for rule (and preamble) language that it believes will improve the likelihood that local jurisdictions will act to benefit fish. In some cases, we suggest alternative avenues to accomplish the same objectives. In others, we urge NMFS to permit some additional flexibility in local application of the principles. We are aware that "flexibility" is often interpreted to mean reduction in regulatory protection. We do not intend that result. Furthermore, we are convinced that NMFS need not be concerned about increasing the rules' flexibility because these rules are not "self-executing." NMFS always retains the option to reject any effort that has abused the flexibility we propose. Surely, however, NMFS does not want to write its rules in a way that discourages local efforts by setting what appear to be unachievable goals.

### **(1) Water Efficiency Principles**

Two of the urban development principles relate to water efficiency and supply. Principle H directs that landscaping rules should reduce the need for watering. Principle J mandates that water supply to serve new development not adversely affect fish or fish habitat. For a number of reasons, the City suggests that these principles be dealt with outside of the context of the urban development limitation in the draft 4(d) rule.

Within the context of the Portland Metropolitan region, NMFS cannot reasonably expect the Metro regional government to address these concerns in its functional plan. Much of the water supply development is outside of Metro's geographic jurisdiction. More importantly, the protection of stream flow through urban development standards is too indirect to be effective. It is hard to conceive of a significant water supply option for the region that does not have a much more direct route whereby NMFS can influence the development and operation of a water supply project using either Section 7 or Section 10 of the ESA. For instance, the City of Portland supplies a large portion of the region from its [Bull Run](#) facilities-and Portland is in discussions with NMFS to achieve ESA compliance for its water system. Similarly, the most recent proposed water supply expansion for the region - the Willamette River diversion -- cannot proceed without Corps of Engineers permits, which will again allow NMFS to participate directly in the decision process. Trying to do indirectly, through 4(d) development standards, what NMFS can do directly seems cumbersome at best and ineffective at worst.

In addition, the Oregon Water Resources Department has the authority to make water right determinations. When exercising this authority, WRD is required to consider salmonid needs under the auspices of the [Oregon Plan](#). WRD also has the authority to require municipal water conservation plans. It is not appropriate or necessary to duplicate these determinations at the local or regional government level.

Lastly, the [Regional Water Providers Consortium](#) and the [Columbia-Willamette Water Conservation Coalition](#) are also engaged in water conservation planning for the Portland metropolitan region, including water efficient landscaping approaches. This regional planning effort, in which Metro is a participant, will help inform and guide water conservation planning by local governments and individual water suppliers.

### **(2) Using the principles of "avoid, minimize, mitigate"**

NMFS urban development principles are aimed at ensuring that development is conducted in a manner that will aid in the conservation of listed salmonids. Some of the principles are stated in absolute terms; others appear to contemplate more or less adherence to the principle stated. The City's existing development codes rely on land use review procedures to assure that: 1) impacts are avoided wherever possible; 2) if impacts cannot be avoided they are minimized ; and 3) under unusual circumstances, where unavoidable impacts occur, those impacts are mitigated. The City of Portland recommends that explicit references to the "avoid, minimize, mitigate" concept, commonly used in environmental management, could usefully be added to some of the principles and their preamble commentary. We provide some examples throughout the remainder of these comments.

### **(3) Urban Development Principle A: *Avoid inappropriate areas such as unstable slopes, wetlands, areas of high habitat value, and similarly constrained sites.***

The reference to unstable slopes, areas of high habitat value, and similarly constrained sites needs to be clarified in this paragraph, with a corresponding statement in the background section. In some cases, the relationship of these types of sites to fish and fish habitat is clear. The potential for pollutants and silt to enter the stream system can be high. However, where these sites exist separate from and with no hydrologic or stormwater conveyance connection to streams, the potential impact on fish and their habitat could be absent. This statement should be modified to refer only to areas that could affect streams and fish habitat conditions. In addition, this principle should probably be altered to take into account the realities of urban settings and the concern for "ownership patterns" and private property takings issues by adding that "where constrained sites cannot be avoided altogether, minimize the effects and mitigate for unavoidable effects."

### **(4) Urban Development Principle B: *Avoid stormwater discharge impacts to water quality and quantity, or to the hydrograph of the watershed.***

This paragraph should be amended by adding language such as: “Where stormwater discharges cannot be avoided with full on-site management measures, minimize discharge through on-site measures as much possible and mitigate for the balance as near the site as possible.”

**(5) Urban Development Principle C: *Require adequate riparian buffers around all perennial and intermittent streams, lakes, and wetlands.***

The term “buffer” appears in this section and throughout the document. The City of Portland interprets “buffers” to include setbacks where disturbance is prohibited, and/or regulated areas where disturbance may be limited or mitigated to protect specific riparian or aquatic functions. The City of Portland agrees that riparian buffers are a critical component in species and habitat recovery. However, the preamble provided in the proposed rule indicates that the NMFS is suggesting buffers based on “one site’s potential” tree height. The rule also states that adequate buffers are required. The principles should be interpreted or clarified to assure that “adequate” means appropriate to the specific site. While management constraints can result in the need to prescribe generic buffer widths, aquatic and riparian science indicates that site-specific buffer determinations are preferable. (*Spence, et al.* 1996; *May, et al.* 1997; *Budd, et al.* 1987; *Pollack and Kennard* 1998; *Castelle, et al* 1994; *Johnson and Ryba*, 1992; *Hicks et al*, 1991).

Site specific analysis can indicate that an appropriate riparian buffer may be larger or smaller than 200 feet. NMFS should make clear in the background section of the rule that site-specific designation, based on scientific analysis and/or overall riparian district planning, is an option for delineating adequate buffer width.

**(6) Urban Development Principle D: *Avoid stream crossings by roads wherever possible, and where one must be provided, minimize impacts through choice of mode, sizing, and placement.***

Add “and mitigate” to the end of this paragraph.

**(7) Urban Development Principle E: *Protect historic stream meander patterns and channel migration zones; avoid hardened streambanks.***

The City of Portland agrees that protecting stream meander patterns and channel migration zones is an important part of a species recovery program. We believe that the intent is to protect those functional elements that contribute to the health of fish. Based on that intent, the City would like the 4(d) rule to include mention of situations where it may not be appropriate to protect stream meander patterns and channel migration zones. Specifically, the implications of exposing fish to brownfield, Superfund, and other potentially contaminated sites in the interest of re-establishing or protecting stream meander patterns and channel migration zones are not clear. This is a significant issue in urban waterfronts. Allowing channels to migrate through contaminated sites, bringing contaminated sediment into the aquatic system, should be discouraged until the impact of this exposure is better understood.

In addition, it may be impossible to restore stream meander patterns on one site when it is surrounded by previously developed sites protected by flood control structures and seawalls. For instance, the Willamette corridor in Portland has been channelized for flood control purposes over the past 50 years or more. It may be that fish would be aided if those conditions could be changed, but such changes are unlikely to happen quickly and surely cannot happen on a parcel by parcel basis. The change would require land acquisition, floodplain restoration, and deconstruction of hardened banks. That sort of change is beginning in Portland’s Johnson Creek watershed, but will take decades even on that smaller scale. The City does intend to investigate options to reclaim floodplain habitats, for instance at Ross Island, Oaks Bottom, and Smith and Bybee Lakes, but it does not believe this habitat function can be provided everywhere along Portland’s urban waterways. NMFS review of any local riparian protection strategies must take such constraints into account and consider the overall effects of local efforts even when site specific limits prevent absolute implementation of a principle.

**(8) Urban Development Principle G: *Preserve hydrologic capacity of any intermittent stream or permanent stream to pass peak flows.***

In discussing this principle the preamble refers approvingly to Metro’s Title III Flood Management Performance Standards. 64 FR 73494. The purpose of those standards “is to reduce the risk of flooding ... allowing for the conveyance of stream flows through existing and natural flood conveyance systems.” The standards address excavation and fill, floor elevation for structures, and hazardous material storage. Additional descriptions in the preamble indicate that the intent of this principle is to prevent the impacts of excavation and fill activities. The absence of references to excavation and fill in the actual rule language creates an inconsistency between the rule language and the preamble. The City of Portland recommends that the rule language be changed to state: “Avoid where possible excavation and fill in any intermittent or permanent stream, and where avoidance is not possible due to site constraints, minimize and mitigate the hydrologic effects of the excavation or fill.”

**(9) Preamble Discussion, 64 FR 73494: *Retain all existing vegetation ... prevent destruction of existing vegetation... to the extent allowed by ownership patterns ... any trails should be of permeable, natural materials.***

This language contains inconsistencies that could create difficulty in interpretation. The paragraph starts out referring to “all”, but then, in later sentences, refers to possible exceptions. The City believes the intent of this paragraph, and others like it, is to apply the principles of “avoid, minimize and mitigate,” if required by unusual circumstances. The language needs to be more explicit. As we have elsewhere, the City recommends that the language in this section be changed to accommodate the “avoid, minimize, mitigate” approach, and the need for jurisdictions to rely on discretionary approval criteria to address development or redevelopment in unusual

circumstances. In addition, the paragraph may put jurisdictions in violation of other federal standards such as the ADA requirements for trail surfaces.

**(10) Preamble Discussion, 64 FR 73494: *...within the riparian set-back to achieve a mix of conifer, deciduous trees ...; Within that set-back the first 50 ft. dominated by maturing or mature conifers, together with some hardwoods ...; The outer 100-plus ft ... mix of conifer, deciduous trees...***

It may be inappropriate to emphasize coniferous vegetation in all cases. While the City understands the benefits that conifers and mixed conifer-deciduous forests provide, we do not believe that coniferous vegetation is present, and especially not dominant, along all riparian zones. A preliminary biological survey of the vegetation along the Willamette River in Portland, indicates that the dominant tree is *Populus trichocarpa* (black cottonwood) associated with *Salix lucida* var. *lusiandra* (Pacific willow), *Alnus rubra* (red alder), *Fraxinus latifolia* (Oregon ash), and/or *Cornus sericea* (red-osier dogwood). This research is supported by Franklin and Dryness (1973) which states “*Populus trichocarpa* is one of the most characteristic dominants along the major rivers ... in the lower Willamette and Columbia Rivers” (J. Franklin & C. Dryness, *Natural Vegetation of Oregon and Washington* (OSU Press, 1973), p. 124). The City of Portland suggests that the rule be revised to indicate that on largelow gradient rivers, such as the Willamette and Columbia, vegetation associations consisting of *Populus trichocarpa*, *Salix lucida* var. *lusiandra*, *Alnus rubra*, *Fraxinus latifolia*, and *Cornus sericea*, are appropriate and encouraged in riparian zones.

**(11) Preamble Discussion, 64 FR 73494: *“To the extent allowed by ownership patterns.”***

The preamble properly acknowledges that land ownership patterns can limit regulatory options. The most effective riparian restoration strategy will be one that is consistent with the legal authorities held by implementing jurisdictions. Buffer requirements that fail to take into account ownership patterns could conflict with long-standing constitutional “takings” principles and therefore fail in reaching their objectives. Jurisdictions must be able to craft buffer and other fish protection strategies that are defensible in court. Further reference here to the principles of “avoid, minimize, and mitigate” can also assist in achieving these objectives.

**(12) Preamble Discussion, 64 FR 73494: *Within that setback the first 50 ft.(15m) should be protected from any mechanical entry or disturbance, structures, or utility installations ...***

This expectation is troublesome and unrealistic, especially in situations involving the repair and improvement of existing infrastructure. For instance, many of the City of Portland’s gravity-based sewers and portions of its water supply system are located within the 50-foot riparian corridor. As surrounding upland properties develop, it is necessary to make new utility connections. Without the ability to connect new properties to existing infrastructure located in the riparian area, the City of Portland may have difficulty meeting growth management targets embodied in Metro’s [2040 Growth Concept](#) and Functional Plan. Achieving increased urban density, an important objective of Portland and Metro planning, requires the availability of urban infrastructure such as roads, transit, and sewers.

The City recommends that NMFS specifically state that some (carefully considered) disturbance into riparian setbacks is justified if it is done for the purpose of connecting to and maximizing the efficient use of the existing urban infrastructure. This kind of limited allowance should be made available to those jurisdictions operating within a comprehensive growth management framework. Failure to allow full use of and connection to existing urban infrastructure could have negative environmental consequences if the result is to reduce development capacity within the existing urban growth boundary. Again, the City also recommends adding language to this section to reference the “avoid, minimize, mitigate” concept.