

Large Wood Public Rule Public Hearing

January 25, 2010 (Issaquah)

Clarifying Questions

Q. I've seen a helicopter placing wood in a small creek near my house. I know that must be expensive. What is the cost of installing LWD? I don't see a cost estimate in the materials.

A. You won't see a cost estimate for our placement of large wood in these procedures, as those costs would come out of the budgeting process. If you're interested we can connect you with staff who can explain how we budget different types of capital projects, and choices in construction. And while it's true capital projects can be expensive, sometimes using a helicopter can actually be the most efficient way when there's no road access.

But to clarify where this proposed rule is applicable, this is really for the big river projects. The term that's used in the rule is "rivers commonly used for recreation" and there is a list of the rivers where this applies. It's really the major rivers, so this rule wouldn't likely apply to the project that you saw on a smaller stream.

Q. It says that these rules and ordinance only apply to projects constructed by King County, but if you get a complaint about a project that's not under King County ownership, don't the rules still apply as to how you respond to that?

A. No, this proposed rule is for the King County projects that we install.

Q. So for other projects that might be dangerous that recreators are calling the County about, King County doesn't respond?

A. If someone calls about a non-county project that they feel is hazardous, we refer it back to the agency that is handling the project itself. So no, we don't have a role in that. This rule does not pertain to those projects. This rule applies to projects that are either constructed by King County or where we are in partnership with the Corps of Engineers, like the levee rehabilitation project on the Lower Green, for example.

Q. Does this rule apply to DDES grading permits?

A. Not specifically. Many projects that this rule does apply to might also need those permits, but this rule is about procedures for the Department of Natural Resources and Parks (DNRP). This rule is not specifically triggered by a permit. This rule applies if we're placing wood, whether we need our own permit or not.

Q. So DDES may still grant a grading permit and someone can do a private project and this rule will not apply?

A. That is correct.

Q. From reading the ordinance, you're talking about recreation and putting wood in, but not talking about issues related to impacts on flooding. Also, you mention talking to individuals, but will you have a process to talk to cities or city councils before you start into projects or during your early phases?

A. As far as flooding, all the bank stabilization projects that we do are presented to the Flood Control District. There are several layers and committees that review projects from an initial staffing level for each of the cities. All the cities are involved, and there is an Advisory Committee and Board of Supervisors, and everything we do is reviewed through that process. It is the obligation of the engineers working on designing those projects to make sure that they are not creating a flooding problem when they design a project. This applies to our bank stabilization and habitat restoration projects. That is one of the things considered a part of sound engineering in any design.

Q. The main statement on the ordinance doesn't even mention flooding. I think it should be included as a consideration.

A. This public rule is in direct response to the ordinance that was created specifically for the concern of recreational safety. You raise a good point, but that's why you see the rule reflected the way it is. We're addressing the concern of in-river recreational safety primarily for people who are boating or floating and how our projects in the design phase address that safety concern. We do a lot of interagency cooperation with our city partners, both through the flood district, through the WRIA forums, and almost every project that gets put in has been vetted both at the staff level and often with elected participation from the cities.

Q. I'm on the city council for a place that's very much impacted by these things and the emphasis seems to be in talking to individuals rather than on talking to the entities that are also going to be impacted.

A: I think that's a fair comment, and again, we're responding to the language and the fairly narrow charge that was given to us by the council. I think it was an excellent suggestion and we certainly will record this and you might put in writing your suggestion that we should incorporate notification of local governments. And there are still the other ways we already communicate with the cities, like the various planning efforts where we actually work with the cities and city staff members to decide what projects will move forward to begin with. There's a lot of communication that goes on.

Q. The ordinance has a very narrow focus. Who drafted the ordinance that the council then passed? Who prepared the text for that?

A. The ordinance was crafted by the County Council. Mike Reed that was the lead council staff that was offering that legislation.

Q. It appears from the Signature Report that King County has stewardship of the waters used for recreation and that the County Council is directing the Department of Natural Resources and Parks to play a lead role in safety for recreation. Is that correct?

A. What we're talking about today is how we take into account recreational concerns as we design these certain types of projects in certain waterways.

Q. The point I want to establish is that in terms of the stewardship for the waters in King County used for recreation purposes that King County is responsible, King County Council is responsible, and they look to the Department of Natural Resources to help them make sure that there is maximum safety provided for recreational use of these waters.

A. We do work very closely with the Sheriff's office, and ultimately it's the sheriff's office which is responsible for enforcing and assisting with public safety in the county. The Sheriff also works closely with the Water and Land Resources Division on project development. What we were saying was that in the application of this rule, it is the department that is responsible for the placement and design of that placement. When we talked about the ultimate management of the river, it is a multi-government agency responsibility and also includes the state, which plays an active role in river management.

Q. Section 1, number 5 says "provides for periodic independent monitoring and inspection of large wood emplacements by an appropriate third-party provider," but if the third party provider found some immediate threat to safety, it doesn't say anything about the consequences of that, all it say they will make a report, but doesn't establish responsibility.

A. The ordinance language was crafted by the council and by their direction we are developing more detailed procedures for how to implement these rules. Where they left some gaps, like the one you pointed out – what do we do when a third party reports a threat to safety – we're trying to interpret that. In our draft procedures we talk about imminent hazards. Usually it is the Sheriff's department that comes with a public safety report and they will then immediately work with our department, the River and Floodplain Management Section, to address that specific project. So I understand that it is frustrating that the ordinance leaves some things undefined. Our job as a department is to do the best we can to take the intent of that ordinance and spell out how we are going to put it into operation.

Q. Do the rules only apply to projects in certain stretches in certain rivers?

A. That is correct. There is a list of rivers which really encompasses all the major rivers in King County. For example, for the Cedar River it's from the mouth to Landsburg dam. In the Snoqualmie river from the mouth all the way to the falls, and then up each of the forks to a substantial distance. It does not apply in smaller creeks.

Q. I'm having trouble squaring that with the ordinance, where it says the rules SHALL apply over all rivers. Is there something I'm missing?

A. That's a good question in that DNRP doesn't actually have jurisdiction over any river per se. What we've done, and this is appropriate to comment on, this process did not start this summer with the ordinance. We had a public process and a motion from the council two years ago and we developed a set of procedures and a list of waterways where we thought this type of thing should apply. The council was presented that information, and for now we're sticking with this same list. You bring up a good point and there's a question there you could raise: should these apply to other places? Right now we're proposing it applies in the waterways on that list which were presented to council in early 2008 where we would follow these types of procedures.

Q. The ordinance seems to mostly speak mostly in terms of public safety, but reading the rules and procedures and your comments, it seems to speak mainly to recreational safety. I was wondering why the terminology changed?

A. The intent of the ordinance was to address recreational safety. Public safety is already the mission of other groups including the flood management section. That group works to address public safety, and wood is installed specifically for that purpose. So the intent of the ordinance is a response to concerns by recreational users.

Q. Have you been talking to the county prosecutor or has the prosecutor approached you in the context of who is ultimately responsibility for safety? And if so, who is the attorney?

A. We have consulted with the prosecuting attorney, Joe Rochelle, for this work. He has reviewed the draft public rule a number of times.

Q. Your material has a question "Has anyone died from this?" implies that since no one has died that everything must be okay. When you say you don't have any jurisdiction over these rivers, then who does? Who is going to take responsibility when it does happen?

A. To address your first question, many people have asked how many people do we know of that have died because of wood that's been placed by King County, and the answer that we've been able to come up with by talking with the Sheriff, coroners office and King County Health Department is zero. As for the jurisdiction issue – again, we take responsibility for the projects we design. We have licensed engineers who design our projects. So the question is: are they responsible for what goes in the water? Yes, they are responsible for what they build. But for the question of jurisdiction of who owns the rivers, it's really the Washington State Department of Natural Resources, not King County. My point was that we don't have jurisdiction for the rivers themselves, but we certainly have jurisdiction for the facilities that we have built in the past and for structures that we build.

Public Comments

Fred Andrews – Recreational boater, Unincorporated King County, Renton near Lake Washington

I'm not very happy to be here today, unfortunately it's with great frustration that I come. But the point is that there is no agency, governmental or elected official, in this bureaucracy that will step up to take responsibility for boating safety on the waters of King County. You've said that this department has no jurisdiction over these rivers. Someone has to be responsible. I have copied Mr. Bleifuhs on correspondence that I've had with the State Department of Natural Resources, and they're not doing anything to help out in public safety. As far as the Sheriff's department, he's stated that everything is just fine. There's only three mechanisms for removing hazards that are floating in Lake Washington which are an immediate threat - the King County Sheriff's Marine Division, there's also a service that's run between the Cities of Renton and Mercer Island, and there's the City of Seattle. Those are the three ways to respond to a threat on Lake Washington. Now I've phoned in those threats and there's been no response. This is 24/7 problem where we could have a threat to boating safety, as people are boating on Lake Washington day and night. The problem is since we have no official or bureaucracy taking responsibility for this, it is an open sore as far as a public safety issue. So mark my words, it is foreseeable by a reasonable person that these circumstances are going to result in injury or death, it's just a question of when. And when it happens, then someone is going to be held accountable. The fact that bureaucracy can duck this, and has ducked this for all this time, is no excuse.

Martha Parker – Unincorporated King County, Renton

I want to make some comments about the proposed public rule. I have been involved in the use of LWD for 14 years. A few years ago I found about the drowning death of a 20-year-old against a LW project created by two state agencies in another county. There have also been deaths in other counties, particularly in the Wenatchee River. I was a member at large in the LW stakeholder group for discussions held June through September 2009. Of 12 committee members, 4 were affiliated with river recreation.

Some of us in the recreation community have examined the two documents listed at the top of Page 5. These are the Guidelines for Bank Stabilization Projects and the Integrated Streambank Protection Guidelines by the Washington Department of Fish and Wildlife. I believe all of us in the recreation community are unanimous in deciding these documents do not address recreational safety adequately. There is other LWD literature that does not ignore safety. We have Technical Supplement 14J and the Stream Restoration Design CD by the Natural Resources Conservation Service of the Department of Agriculture. We also have scientific paper references from the Journal of Hydraulic Engineering published by the American Civil Engineers and the Corps of Engineers' EMRRP Technical Notes. EMRRP is the Corps' Ecosystem Management Restoration Research program.

On the top of page 6, line 7, I object to the phrase "as appropriate." My view is that most any time a wood structure is placed in a river, a hydraulic analysis should be done. The lack of such

analysis is the reason for at least three failures of projects. Two were in the 1990s and the last one was a 2008 project. I'd like to show you this picture - in it there's a chain on the log stuck under the bridge on Williams Avenue bridge in Renton. The project was built miles at river miles 7.2-7.6, so it came down the river 6 miles. And it actually damaged the steel bridge, although not badly.

I am very glad for the language in the public rule on Page 6, lines 4-10 which specifies designs done by professionals and signed by a licensed professional civil engineer, CE. This is the kind of professional standards the county should have. These standards are needed not just for recreation interests, but to avoid damage to the bridges and other downstream structures often paid for by the taxpayers. I have doubts about the need for a return to the public at three different phases of LWD design - 30, 60, and 90 percent. The principles needed to avoid problems have already been submitted to the county some time ago.

It's not that difficult to place wood where it won't endanger people or property. There are plenty of places on rivers for wood. Along relatively straight alignments with the current, well downstream of constrictions, in wide open low grade reaches, at the heads of islands pointing downstream, in wide bays, tucked behind groups of boulders on the inside of bends, in groups where each bole covers the rootwad of the next tree. I have seen county projects where these preferred places were used.

Abby Hook – Hydrologist for Tulalip Tribes, also lives in Seattle

Salmon recovery is critical for the Tulalip tribes' economic, cultural and spiritual viability. We have been heavily involved in salmon recovery in all our usual and accustomed treaty basins, including the Snoqualmie, which is why we were involved in the stakeholder process that Martha referred to. We are behind in the implementation of large wood according to salmon plans. We at Tulalip are concerned that the projects that King County does with the new rules might be looked on unfavorably by some of the funding agencies if the ecologic benefits are watered down. Right now we are seeing some projects that are built with recreational safety in mind where we've been happy nevertheless with the ecological benefits. However, we're concerned that the rules leave some ambiguity on the ability of citizens to call in and report a hazard, and it's not clear to us how the decision is made to change the project. We think some of that ambiguity may affect funding sources, which is critical because King County does so much great work, restoration-wise, in the basins where Tulalip fish. As part of the stakeholder committee, we did not have a formal study on accident data, but they did a very thorough canvassing of all the emergency responders in King County and the majority of the accidents were caused by inexperience, lack of PFD, or alcohol. We would like to see the county start with a PFD law. We think that could be extremely useful in keeping people safe.

Roger Lowe: Kirkland, Unincorporated King County.

There are deaths. You don't have a record as far as I know of a death that is directly related to wood that King County has placed. However, there are on average 2 or 3 deaths every year related to woody debris, and while it's true that sometimes these people aren't using PFDs, they aren't using common sense, they may have been using alcohol. We're not going to be able to change that. People, kids, are going to jump in our rivers. What we can change is the factor that

contributes to those deaths. As to whether the wood is placed by King County or not, the King County wood placements and also policies that encourage the recruitment of wood means more wood and arrangements of wood that are potentially deadly. So your policies and actions, even if they don't cause specific deaths, do influence the number of people that are going to die. I think that the proposed ordinance is very inadequate, it does not address other safety issues. It does not address what happens to cities, it does not address how the rivers change and cause more flooding, and it will, and is, causing more flooding, not less. There are a great many ways that do what we want to and need to do for the fish and other aquatic river animals. There are good ways to solve these problems and we should be using them rather than making a conflict between environmental solutions we would like to have and the need for safety and protection of citizens and property.

Maxine Keesling: Unincorporated King County south of Woodinville.

In your Public Review Draft on line 29 it says “The function of the wood is to interact with river sediments, deflect and slow erosive stream velocities along the bank,” etc. I have personal knowledge of installed woody debris deflecting the river flows into the opposing bank and eroding that opposing bank. And this list of the rivers it shows the Sammamish River Lake Washington to Lake Sammamish. I gave written input and put in a related newspaper article to this committee, but part of it refers to when the US Congress approved King County's maintenance takeover of the straightened and riprapped Sammamish River. The Congressional instructions were to plant nothing on the banks that could fall into the river and to place nothing in the river that could block river flow and navigation, yet since then, KC has placed large woody debris upstream of the NE 116th Street bridge and advocates planting trees on the river bank and the City of Bothell already is very busy planting trees on the Sammamish River bank. This is not according to Congressional instructions when that stream was straightened to prevent flooding.

Chuck Pillon: Rural King County, May Valley

I've been engaged around this issue for some years now. I got word of some trouble in the Cedar involving a drowning some time back, and I started to do what is essentially happening here today, and I began to comment. I sent letters to sheriffs and letters to others, and I began to realize there is a disconnect. Now it is said that there is a positive dynamic that gets these problems attended to, and we've had a hand in that process with the Sheriff's office and with the Rivers people, and it is now possible to see quicker action and to prevent death and injury. I recognized what had to happen is that we, the people, have to step up and take our responsibility.

We went from reviewing that project you saw in the picture Martha Parker showed, the one where wood went 7-miles down the river, and darn near tipped over the bridge in Renton. And as to the danger, there's also an 8-inch gas main at the bottom side of that bridge, and if a little more of these detritus in the river, man made or otherwise, would have hit that bridge and tipped it over, it would have dammed that river and wiped out north Renton. And if you added natural gas into that environment, its certain to find an ignition point, and the we would have had a real catastrophe. So, what have we done? We have met on demand basis, but friendly, with Steve, with Mark and the others and representative of Ombusmans' office, right at the site where that had failed. We looked at, insisted upon looking at the engineering, not to damn or to defy, but simply to say “lets take a second look” at it. The project has been reengineered.

I will tell you further, and I made a joking reference to taking a chain saw and taken some stumps out of the Cedar one time, there was a standard modus that had had these rootwads sticking out of the river and sometimes upstream. Enormously dangerous. I'm happy to tell you that if nowadays if you look across from the market at Cedar Rapids out there, you'll see rootwads that have been installed in a much more sophisticated manner, but with a simple approach with a deflecting log above them which certainly makes them safer, and on the other hand makes better habitat. This was accomplished not by commenting but once again by confronting on a most constructive basis.

I visit the Cedar pretty often, and was told me that a kid nearly drowned in a log – a strainer – clear across the river. I waded out as far as I needed to and got a picture of where their inner tube was still stuck there. Years ago that could have taken some time, but now within a week that tree was gone because we were able to talk to the River guys and to the Sheriff's people, but that was because we went to the river bank. That's what the solution that lies before us will only come from, if we join in this process rather than just comment.

Jim Berger, Carnation

When it comes to engineering what they're doing in the river, I don't have any problem with adding woody debris to the river or rebuilding the rivers or for making them more natural. I'm a river recreation user, I've got a boat and I'm on the river quite often and I dodge wood whenever I go up in there. So I have a couple things about this ordinance that I would like to talk about. In the public review draft on Page 3 I really like the section where it says "the decision to recreate in rivers is ultimately the responsibility of the individual and enhancing awareness through public education and outreach whether by state, county, or non-governmental organization is perhaps the most important strategy to reduce risks." I would like to say that we really need to emphasize personal responsibility, personal safety for everyone that gets on the river. Rivers are dangerous. There's a lot of weight in a cubic foot of water and if you don't pay attention it can take you under and kill you really fast. I don't think we should be blaming King County, Washington State or any other agency for it.

A couple of things I don't like about the it is on page 7 under the title of "Design review." One of the possible solutions is "Work with the King County sheriff to restrict recreational use in the project area so that the project can meet it's objectives while also protecting public safety," and then in the last section on the ordinance in the Monitoring Project Program Outcome and Applying Adaptive Management it says that "Signing a river as hazardous and unsafe for recreational use, or in extreme circumstances and when deemed necessary by the King County Sheriff's Office, "closing" a portion of a river to recreational use " The last page also mentions closing the river. I would like to say that I don't think closing the river to recreational use is an appropriate response to a problem that engineering creates. I think there should be another solution added to that - fix the problem if you see that you've created a problem. I don't think closing the river is an acceptable response and that line should not be in the ordinance.

Fred Bereswill, Deputy Mayor, Carnation.

I first wanted to address a couple of the earlier comments. Regarding response to hazards on Lake Washington, don't forget the coast guard and don't forget the Bellevue Police Department.

They're out there and very efficient. For recreational, it was commented on requiring PFDs on rivers might be an appropriate way to approach the issue of safety. There are some states that do require it, so that's something I think we could look at. I think your procedures need to be a little more specific with flood issues and the consultation with the affected cities or other entities. Flooding issues are a big, major topic in the Snoqualmie Basin and Tolt Basin. This comes from last year where we in Carnation ended up being an island for 48 hours. If you are going to look at it, the comments in here said that we talk about the river flows during recreational season, but don't forget there's about three or four months of the year where we have flood issues. So I think that any design and concept should be taken in regard to that respect. Also, if you are working with the cities, don't forget that we have a Shoreline Management Act we have to comply with. That's why I think a little more emphasis on coordinating with the cities. Also, you say you're going to communicate with all the affected people by web and email, but I would like you to consider meetings with the cities one-on-one at one of our council meetings at the design phase so we can talk to the council and our public work director can be involved. So I think these are housekeeping items, or maybe not, but I think these are important to implement the ordinance so it's going to work a lot more easier for everyone.

Large Wood Public Rule Public Hearing

January 28, 2010 (Mercer Island)

Clarifying Questions

Q. Does this process occur anytime a King County project has a grading or clearing permit associated with it? If a project goes to a streamline JAPRA process would this process still be implemented?

A. I believe your question relates to another ordinance that requires habitat restoration projects in the agriculture protection district to take into account the benefits or impacts to farmland. This ordinance we're discussing tonight is not triggered by a permit but by the actual inclusion of wood itself in these certain rivers commonly used for recreation. We have made available a list of the rivers here tonight and on our website. Basically, it applies to all the major portions of our major rivers. It includes large tributaries such as the Tolt and Raging Rivers, but does not include any of the smaller tributaries.

Q: Has that map with river miles been developed yet?

A. There has not been a map published, but it's something we can certainly do. A list of rivers these procedures would apply to was developed in early 2008 in response to a County Council motion. It was made separate from the rule so we can adjust it as we get more information about patterns of recreational use without having to go through a public rule modification to expand or contract the list. We will notify people via website and email of any proposed changes to the list.

Q: It references DNRP projects – does this in fact apply to all branches of King County government including the Roads Division?

A: No it doesn't.

Q. So if a Roads Division project adjacent to a river that requires large woody debris it would not go through this procedure?

A. That's not necessarily true. The text of the rule is very specific to the Department of Natural Resources and Parks (DRNP). In practice, Roads will very likely follow the same procedures, but we can't obligate Roads because the Council told this Department only to do this.

Q: Has anybody projected the cost of this regulation?

A. We did an analysis and there are a couple layers of cost to this regulation. One is the direct cost to each individual project. That could vary anywhere from \$20,000 to \$80,000 per project, mostly depending on the extent of wood used, because we are now

asking for the project to go through more documentation and effort related to this process and to involve more public review process. The other costs are administrative costs of the programs and having that commitment to internal coordination and response. And then the third element is the council request that we hire an independent third-party reviewer to look at and monitor the wood placement periodically. That additional cost might be on the basis of \$30,000 plus to have a consultant.

Q. So, needless to say the additional cost will be in the tens of thousands of dollars?

A. Yes, there are real costs associated with this. Plus, there's a fourth element. If there is a situation with a project where we feel compelled to do major modifications in terms of safety to the point where the ecological objectives are diluted, we are proposing in the rule that we are obligated to initiate mitigation somewhere nearby on that same river system. That would be an additional cost.

A. Do we have any numbers on rafters who have been killed or injured by county-placed large woody debris?

A. We have, and you'll see this included on our FAQ sheet. For King County built projects we do not have any documented deaths, and the reason we're confident in saying that is that the medical examiner's office does an assessment to attribute cause when there is an accidental death. We know that there are on average 2-3 river drownings per year in the county. The number of injuries are very hard to say because those don't get documented in the same way. A person might go to the Emergency Room or they might bandage themselves up.

Q. It seems as through the county is taking on a great deal of responsibility to deal with this issue. Are there any responsibilities that the county sees instituting for the rafters?

A. Many people have suggested that we should take some part in instituting a Personal Flotation Device (PFD) law. Many of the professional rafters and kayakers already wear them; it's often the casual users that lack them. There are examples around the country including this state, of county laws that require PFD on any moving waters, so I think that is one step that could be taken.

We did have stakeholders community involvement in a number of groups last year and one of their primary recommendations that came out of analyzing protocols both for placed wood and natural wood was the need for updated public education. For example, children along the Upper Snoqualmie in North Bend go through a program called River Sense that teaches what it really means to live next to a river and the related hazards. It may not be a role that would necessarily fall to the county, but it is something that possibly a non-profit group, recreational organizations, or the state would take on.

Q: In the procedures you talk about periodic monitoring. Would that be during the design process or is that post-construction?

A. The ordinance itself requested that we monitor our large wood projects with a third party, and that would be post-construction to see how it's functioning and if it's safe. An additional monitoring piece is that at least every two years the Department will meet with the stakeholders to monitor how these procedures are working, to see if people feel like they are able to give input and they're getting information back. Again, we have put that in a separate document because changing anything in his rule would be time consuming and expensive. But we're committed to making sure that the way we're interacting with the public is working for the public.

Q: How do you get on one of these stakeholder committees?

A. We had a small and focused one that worked on this wood placement issue and about the county's management approach to natural wood hazards. They self-assigned the topic of outreach and education. We don't have ongoing stakeholders meetings at this time, but certainly let us know if you have an interest. And while we don't have a active committee meeting at this time, we will be looking for public input when we have our annual meetings to discuss projects where we're placing wood. We are planning to set up a list serve where you'll be able to go on to the website and request to receive emails regarding planned projects, either by specific project or by watershed. If you have input please give us those in writing so that we can consider them as we move forward.

Q. What happens to a project if there is a disagreement between factions for recreational safety and for salmon habitat?

A. The ultimate decision will be made in our department at the project management level or the management level if it needs to. While we want to hear everyone's input, all these projects have multiple objectives that need to be met, including protecting people who live outside the river. There's flood protection projects where we use wood and we have a responsibility on the salmon side we have to balance.

Q. Has King County or anyone else done any quantitative analysis or evaluation of projects you have built to learn what sort of biological effects there are, particularly in regard to salmon processes?

A. Every one of our capital projects has a monitoring component, some of which looks at how the structure persists; others look at whether there's a change in habitat, which is whether it is increasing the amount of pools or creating pools in a specific area. Right now the monitoring happens in different groups for different types of projects. There is nothing from our section that is specifically looking at increased activity of salmon, but there is a bibliography available on our website of about 400 documents regarding large wood use. We don't have a list at this point of results from all our projects, as it takes a long time to monitor physical change, in particular biological ones.

Public Comment:

Steve Reutebuch, Seattle

I'm not representing a group tonight, but I am a member of river safety council and a member of Paddle Trails Canoe Club, but this is my own personal comments tonight. To start with, I wanted to thank the Rivers section for all their efforts, I think that's one of the reason why we haven't had problems in King County, so I wanted to thank you for all the efforts to put this together. As a boater and recreationalist I really support salmon recovery, so the comments here are meant to be constructive and in support of what you're doing.

The first comment, on the first page and a half in the section on the background and policy context there should be a statement that the reason that you're doing this is because in all those permitting processes you go through, none of them comprehensively address safety. It has fallen through the web of permitting. On page 5 lines 1-9, the Streambank Stabilization project document and the ISPGs, they are great for the biological piece of it, but safety is not addressed adequately and in some cases the information is contradictory. I know the ordinance said that you needed to use those two references, but I also say that a good reference document would be the National Engineering Handbook for the Natural Resources Conservation Service Technical Supplement 14J "Use of Large Woody Materials for Habitat Bank Protection," that's in the National Engineering Campaign. This would be great additional resource. Also on page 5 lines 35-39 are the factors that you look at with regards to safety. I think there's one really important one that hasn't been included should be "risk of entrapment by a person swept by the current into a structure" because that's the real safety issue.

The next comment also on page 5 - the motivation is not recreation, the motivation is for public safety. So where you say changes motivated by recreation concerns, the changes are motivated is by public safety concerns. And finally number 5 line 3 on page 7, on working with King County Sheriff's – have you made the Sheriff's offices aware that they are now going to be part of the design at the 30 percent level and have you gotten any feedback from them? Because I think they need to know that. And again I want to thank you a lot and I think that most projects can be constructed safely.

Lawrence Reymann, Renton, President of Watershed Steward Association.

Obviously, we have to have rivers that are good for salmon and provide a certain amount of recreation for boaters and swimmers, but it seems as through these regulations are using a very expensive hammer to swat a fly. You can't make the beaches of the oceans safe for swimmers and I don't know that you can make the rivers safe for any kind of swimmer or rafter who is able to set foot inside that river, especially since the vast majority of the wood is naturally placed wood anyway. So what these regulations seem

to do is create a much higher degree of difficulty for habitat preservation, a much greater cost and a great mechanism for if not stopping these mitigations then greatly slowing down the processes and greatly increasing the cost of restoring habitat. Because the bottom line with the rivers is that we have hammered these rivers as far as habitat for salmon is concerned, so we need to create a world where we live with these fish rather than a world where we live instead of the fish because that world instead of the fish is the East coast, many parts of California, many parts of Oregon and Washington. This is a complicated process but I think that these regulations just make it so much more difficult to restore these salmon runs.

The sockeye run this year, you want 350,000 through the locks to sustain a run, last years we didn't get 34,000 through, this year we didn't get 22,000 through the locks on sockeye. The Coho and Chinook runs are even worse. So we have to restore these salmon because if we create a world where our children can't come to the Cedar or the rivers in King County and see these fish, their lives and our legacy will be dramatically and significantly damaged. We have to be able to have rivers where if it's a choice between fish or recreation, the fish don't have any other options, so obviously let's try to make it a safe as we can but lets put some responsibility on the recreational user for safety devices, sobriety, skills, experience and use the rivers for fish and for people.

Fred Andrews, Unincorporated King County

I hear what the last speaker is saying, but the point is that the government should be a focal point for allowing citizens to co-exist in a balance. It's not one or the other. Following the meeting last Monday I talked to the two major areas that were involved in water safety. I spoke to the King County Marine Unit and I talked to the Seattle Marine Unit. What they told me is that there are a lot of logs coming into Lake Washington, and while I'm talking Lake Washington specifically, this applies to all the waters of King County. There are a lot of logs and floating objects in the water. These are called deadheads and they are very hazardous. Extremely hazardous. They're deathly hazardous. And if you saw the teenagers in the summertime out on the lake trying to water ski, you would know what I'm talking about. These deadheads float just below the water, these can be large logs and deadly. The point is, there are a lot of logs coming into the lake, and while they are periodic, they are not getting less. So the logs in these policies that you're talking about, they are threats that are showing up in the water. Now, you might say that the logs don't belong to you, that they belong to someone else, but that just means some other part of the government should be keeping data and taking care of the removal of these threats. It doesn't make any difference for the person who is out on a boat that gets killed whose log it was. I'm telling you people that work as bureaucrats, that you have to make it known to your management and take responsibility because you have not taken responsibility. This problem has existed for a long time. These damages are foreseeable by a reasonable man, and you are responsible.

Martha Parker

I appreciate the efforts to address public safety. I'm hoping for continued improvement in the design and construction of woody debris projects. We need to remember that private

projects are not included in this protocol. On the South Fork Snoqualmie, a private project was not designed correctly, and it fell apart during the high water of January 2009. The owner said he lost about 30 feet of property. The project as far as we know has been completed and is much better. I want to say that it is not that difficult to place wood where it won't endanger people or property. There is plenty of room on rivers for wood, along relatively straight shores aligned with the current, well downstream of constrictions, in wide open low gradient reaches, at the heads of islands pointing downstream, in wide bays, tucked behind groups of boulders, on the insides of bends, in groups where each bole or tree trunk covers the rootwad of the next tree, and I've seen county projects where all these preferred places were used. However, there has been something wrong with the engineering on some of these projects. There has been, I believe, a lack of engineering rigor. You can see in this picture a chain on a log a group of three logs stuck under the Williams Avenue bridge in Renton. These groups of logs came down the river 6 miles and damaged the bridge. Obviously to me it's a civil engineering failure and it shouldn't have happened. There was something wrong or you wouldn't have lost the logs. So, I'm hoping and I hear that there is increased ability - that somebody new has been hired in the county Rivers section and I'm hoping that that person will help. The claim was made here that there isn't anything in other literature about river safety in regards to woody debris projects, but Steve mentioned it earlier in his comments. This is free, all you have to do is go on the NRCS Department of Agriculture website and order it. In it is the supplement that will tell you give you a few rules about using woody debris.

Jean Garber, Newcastle [THIS STATEMENT ALSO PROVIDED ELECTRONICALLY BY THE SPEAKER. THUS NO CORRECTIONS HERE]

I bring two perspectives to the issues before us tonight. First, while a councilmember for the City of Newcastle I served for ten years on WIRA 8 salmon recovery council and its predecessor forums. From that perspective I recognize that the placement of large wood is essential for salmon recovery. And second, in a previous life I canoed the rivers of the east coast and more recently have canoed the Snoqualmie River in springtime. As a canoeist I encountered natural hazards such as boulders, large wood and other debris regularly, and regarded them as part of the canoeing experience. Given the substantial natural hazards already present in the rivers, it's hard for me to believe that adding some well-designed large wood projects at appropriate locations would significantly increase the hazard. In fact, large wood is typically intended to restore ecological functions that used to occur in nature when the rivers had a mature riparian system. Don't get me wrong, I understand the need for reasonable balance for what's good for salmon and what's safe for the public, but I fear the proposed procedures would be so costly and time consuming that badly needed large wood projects would be unnecessarily delayed or abandoned or their design water down to the point they would no longer serve their intended purpose. I encourage a more streamline process that includes some of the elements which are included in these draft procedures:

1. Educating river users about natural hazards, the potential to encounter large wood projects and the purpose of such projects. Maps showing the locations of the projects should be made available, education could also emphasis the need for personal

responsibility on the part of river users, including appropriate skills and equipment, constant vigilance and common sense.

2. Requiring that the design and installation of large wood projects take into consideration river users and be approved by an licensed professional civil engineer and a professional ecologist.
3. Using the required environmental review process to obtain public input, rather than create a separate process.
4. Post construction monitoring and adaptive management to assure the project is effective in improving salmon habitat as well as safe for river users.

Given the importance of large wood projects to the salmon recovery, I hope we can find a way to seek public input and mitigate potential public safety impacts without adding layers of costly and time consuming process.

Roger Lowe

For those of you who are concerned about fish, I am too. My dad was a fisherman, I've been a fisherman. On the Cedar River we had a peak of about 700,000 sockeye in 1972. That was the end of the 120-150 years worth of continuous, complete removal of wood on the Cedar River. The runs have gone downhill since then. It was at that time in the early 1970s that we stopped removing the wood. You check that, and I'd be glad to help you if you'd like. The county has already identified that they haven't found literature that shows that the wood helps fish. You have rivers like the Columbia and the Rogue River in Oregon almost perfectly free of wood, yet with record runs recently and historically, of enormous runs of salmon. These rivers are free of wood. There are many like that in Alaska as well. So on one hand you have a lack of quantitative scientific evidence that it helps. On the other hand we have overwhelming evidence that we can have salmon without wood.

Now the real problem, the real hazard, and the real reason that we should be making this a public issue is that we know that it causes flooding, that it is a cause of river channel relocation, to establish there are plenty of papers that I would be glad to let people see. A lot of references in your list also shows that. That's a hazard that the general public needs to be made aware of, that it's a problem that we have a problem with our river because they are essential controlled features. We don't have any other way to carry off floodwater and we have lots of flood problems in this county and in this state. We've got to maintain that characteristic. The challenge is how do we find ways to help salmon that do not harm people, and vice versa? We don't want people to harm salmon. And I'm here to tell you that I've looked into this and there are lots of things that we can do for salmon that are not contradictory to public safety. We need to find that it's not beneficial to salmon or for people to put us in conflict with each other. There are good ways to help salmon. That should be the emphasis - trying to find ways that are not as expensive and harmful as your wood. I would like to see that done and I'd be glad to help. I hope some of you will get in touch with me because we need help from the citizens to help the public and the county understand how this can be done.