

Handout @ 9/9/08 G-MNR mtg
2008-130191

River Safety Council

www.riversafetycouncil.org

Report Addressing Public Safety in Placement of Large Wood in King County Waterways

by

Water & Land Resources Division
King County Department of Natural Resources & Parks

River Safety Council Response

March 25, 2008

General Comments from the River Safety Council

We, the River Safety Council and King County Department of Natural Resources and Parks (DNRP) share a common goal of creation of sustainable fish habitat that does not endanger recreational river users. We are very pleased that the County has taken the initiative to address public safety, and particularly recreational river user safety, in the placement, design, and monitoring of large woody debris (LWD) structures in the waterways of the County. We believe such a proactive approach will allow the County to restore waterways while at the same time lessening the likelihood of a repeat in King County of the tragic drowning caused by a LWD installation on the Sol Duc River in 2006.

We greatly appreciate the opportunity the County has given us to provide input into the response to KC Motion 2007-0622. The County Water and Land Resources Division (WLRD) has done a very good job, under a tight timeline, pulling together stakeholders to discuss all aspects of the issue of LWD and recreational river user safety and compiling relevant information about agencies involved in placement of LWD and the permit and regulatory framework under which LWD installations are controlled. This effort has resulted in the March 2008 document titled "Report addressing public safety in placement of large wood in King County Waterways". We would like to first provide general comments about the report, followed by comments specific to each of the 5 recommendations to the Council listed on pages 13-14 of the report.

In general, the report is very well organized and complete. An insight into the historical position of the county is shown by the background in Section I-B. In the report, logical considerations and facts on river morphology are patiently related. The appendices are useful, and add to the reader's perspective on the problem being addressed.

The report recommends a new set of protocols to be adopted by King County which will better address the concerns of river travelers about the increasing amount of large wood to be found in county rivers. If these protocols were adopted, river safety will be much improved.

It's especially appreciated that private projects, permitted by the Department of Development and Environmental Sciences (DDES), are recommended to require consideration of recreational river user safety during the permitting process. It is hoped that a new safety protocol in DDES will prevent any dangerous LWD projects similar to that constructed by a private party under emergency permitting in 2007 on the South Fork, Snoqualmie River.

Section I-C on current practices is appreciated and is informative and accurate, except for a few minor points. To clarify, the Boater Safety Advisory Committee did not meet annually, as is

stated on page 4. There were several years, from about 1999 through 2005 with no meetings, with good reason – no projects were in progress. And, the County has constructively engaged the River Safety Council (successor to the Boater Safety Advisory Committee) in 2007 to present.

It was very heartening to see that the County's summary of existing permit, procedural, and regulatory framework (Section III-B) clearly pointed to the same conclusions that we have reached: The State Environmental Policy Act (SEPA) review and the U.S. Army Corp of Engineers Section 10 of the Rivers and Harbors Act review only give a cursory mention of recreational river user safety and neither have any provisions, established procedures, or requirements to specifically address recreational river safety. And, no other federal, state, or local permitting process or law requires consideration of recreational river user safety in the placement, design, or monitoring of LWD installations; hence, the need for the County to undertake efforts to fill this gap in government's responsibility to ensure public safety.

In Section IV, Proposed Procedural and Design Standards, the list of rivers that have recreational river use is incomplete. There are many more smaller rivers (e.g., the Raging river; Tolt river, RM 0 to RM 8.7) that are not included in the table on page 12. We do not believe that government or stakeholder identification of recreational river use can be very accurate due to the large projected increase of population in outlying areas. Instead, we recommend that for planning purposes, the County should assume that every stream of size suitable for any type of water based recreation (swimming, wading, fishing, and boating) would by default have some level of recreational river use in the absence of information to the contrary. It is our belief that every stream large enough to float a person on an inner tube will have people (likely children) doing just that.

Although we are pleased to see the proposed involvement of stakeholders such as the River Safety Council in many aspects of proposed processes that are outlined in the recommendations #1-#5 (Section V), we feel that it may be placing undue emphasis on a knowledge-base that should be developed within the County structure itself. It is important that the County assume primary responsibility for developing goals, assessing the situation, conducting any necessary research, developing knowledge, formulating significantly detailed guidelines and implementing projects that reflect a requirement for public safety.

Ultimately, we would like to see a recommendation that consolidates knowledge, planning, approvals, construction, supervision, responsibility, review, maintenance and record keeping regarding river safety in one department, as other specialized skills such as law and health are now consolidated within County departments. We realize that, given current County legal authorities, this may not be possible at this time. Therefore, we strongly support the concepts outlined in the report recommendations that work with existing authorities.

In closing our general comments on the report to the Council, we again want to state that the WLRD has worked very well with the recreational boating community over the last decade to improve LWD installations under their purview. We fully support the closing statements of the report (Section VI, page 14) that...“it is essential that the County be very deliberate in how we place wood, so that we build structures that provide a reasonable measure of public safety.

Implementation of a clear and transparent methodology for consideration of public safety issues in the design of future projects involving large wood placement is one of the most powerful tools for achieving the project's desired functional outcome and public safety".

We look forward to working with the WLRD over the next year to ensure that recreational river user safety is fully addressed during the revision of the "Guidelines for Bank Stabilization Projects in Riverine Environments in King County" (under Section V, Recommendation #2), in the development of river user safety conscious action alternatives that DDES will use in emergency permitting situations, and in increasing awareness of LWD safety issues and location of LWD in King County.

Comments Specific to Section V, Recommendations

(See attached excerpts from the WLRD report pages 13-14 for full text of recommendations).

Recommendation #1:

1. We recommend that "public safety" be defined to explicitly include "recreational river user safety". We are very pleased to see that "full consideration of public safety" is immediately requested.
2. Although design of current projects by WLRD is much improved, we believe that many past projects warrant a safety review, and any necessary measures to make them less hazardous to river users.
3. We wish to applaud the authors for including in this recommendation that KCDOT immediately adopt the same procedures as are in place for the Rivers Section regarding LWD design, placement, and public input and notification.

Recommendation #2:

1. We applaud WLRD in this recommendation to update the current KC Guidelines for Bank Stabilization (GBS) document to fully consider public safety in the design and construction of future projects and would also recommend that a section on post-construction monitoring be added that specifically addresses issues that can occur after construction that endanger the public, particularly river users.
2. We encourage the County to engage the River Safety Council and other possibly other river users (e.g., recreational fishing groups) in this GBS document update process to capitalize on the public's local knowledge regarding local rivers.
3. The current GBS document has some figures which illustrate installation designs that are particularly dangerous to river users. Page 7-24, Figure 7-16 of the guidelines shows the dangerous example of woody debris rootwads extending into the current. It should also be mentioned how dangerous to a swimmer an installation such as Figure 8-11 on page 8-27 can be. Illustrations of designs generally considered outmoded based on public safety considerations should only be distributed with the disclaimer that these types of designs are no longer recommended based on concerns regarding recreational river user safety. Such disclaimer should be included on web documents and web, email and other transmittal of documents containing figures or descriptions of designs no longer considered appropriate. Once the GBS document is updated to fully address public safety, this issue will become moot.

4. In revising the GBS document, we encourage the WLRD to incorporate existing recreational river user safety guidelines that are contained in the River Safety Council's "Proposed Safety Guidelines for the Construction and Placement of Large Woody Debris (LWD) Affecting Stream Used for Recreation in Washington State" (<http://riversafetycouncil.googlepages.com/LWDSafetyGuidelines5-1-07.pdf>).
5. We also encourage to WLRD to consider the safety guidelines regarding LWD placement contained in the Natural Resource Conservation Service, National Engineering Handbook, Part 654, Stream Restoration Design, Technical Supplement 14J, Use of Large Woody Material for Habitat and Bank Protection, Table TS14J-1: Limitations on applicability of large wood structures, particularly the considerations listed under table variables "Sediment load", "Navigation and recreation", and "Risk." (http://policy.nrcs.usda.gov/media/pdf/H_210_654_ts19.pdf)
6. We recommend that the revised GBS document specifically include a required "LWD Design Safety Checklist" to ensure that the full consideration of public safety is well documented and approved by responsible government employees.
7. Once the revised GBS document is approved, any variance from those guidelines should require a burden of proof regarding need, objectives, safety and other pertinent criteria provided by those requesting the variance.

Recommendation #3:

1. We strongly support a public safety review in the DDES LWD permitting process; however, we recommend that WLRD complete the public safety review for DDES, particularly given that DDES has no expertise in-house to conduct such a review.
2. Further, we recommend that WLRD be tasked with monitoring DDES approved LWD projects during and post-construction to ensure that the permitted design is correctly implemented.

Recommendation #4:

1. We strongly support the recommendation to have emergency options that have been well vetted regarding public safety, particularly recreational river user safety.
2. We recommend that WLRD staff with river safety expertise work with DDES in the identification and development of alternative options for emergency permits.
3. We recommend that the list of alternative options be reviewed by the River Safety Council and other interested river user groups.

Recommendation #5:

1. We applaud the recommendation to promote increased awareness of LWD by the County; however, we would like to see a defined process of review, reporting and publicity for other government agencies constructing structures in rivers so that other jurisdictions not governed by King County law could be open to public scrutiny.
2. We recommend that the WLRD update their river safety brochure to be more informative on the danger of LWD in waterways (<ftp://dnr.metrokc.gov/dnr/vcgis/graphics/woodydebris/lwd.pdf>) and other boating safety materials relating to LWD in rivers.
3. We would recommend that the County explore methods for evaluating the effectiveness of river safety outreach and education efforts.

Comments on Appendix A: Agencies, Groups, and Individuals Involved in Placement of Large Wood

1. "River Safety Council" should replace the now defunct "Boater Safety Council" in the table.
2. We recommend that the stakeholders list be expanded to include businesses that sell kayaks, canoes, rafts, and drift boats, as these companies have frequent contact with a very large pool of recreational river users not easily reached through the entities listed in Appendix A.

Comments on Appendix C: KC Procedures for Consideration of Public Safety in Placement of Large Wood (LW) in Waterways

3. We recommend that Section IV, part 9 (Final Documentation) include the requirement that the project team complete the LW project documentation, including a "LW Design Safety Checklist". This LW Design Safety Checklist was inadvertently dropped from the draft procedures document that was distributed and discussed at the January 25, 2008 Stakeholders Meeting. We feel that explicit inclusion of it in the Final Documentation section of the proposed KC procedures will ensure that it receives the consideration due public safety.
4. Although we are pleased to see the proposed involvement of stakeholders such as the River Safety Council in many aspects of proposed procedures, we feel that it is placing undue emphasis on a knowledge-base that should be developed within the County structure itself. It is important that the County assume primary responsibility for developing goals, assessing the situation, conducting any necessary research, developing knowledge, formulating significantly detailed guidelines and implementing projects that reflect a requirement for public safety.
5. We recommend that the stakeholders list for these proposed procedures be expanded to include businesses that sell kayaks, canoes, rafts, and drift boats, as these companies have frequent contact with a very large pool of recreational river users not easily reached through the entities listed in Appendix A.

Contact Information:

Steve Reutebuch, Council Member
River Safety Council
9536 46th Avenue NE
Seattle, WA 98115
Ph: 206-525-8678
Email: sereutebuch@yahoo.com

Excerpt from:

Report Addressing Public Safety in Placement of Large Wood in King County Waterways
King County Department of Natural Resources and Parks
Water and Land Resource Division, March 2008, Section V, pages 13-14

V. RECOMMENDATIONS

Findings all indicate that much of what is currently being done is working well. However, there is room for improvement and clarification. These recommendations are intended to formalize what is working, improve practices where possible, increase transparency, and give some certainty to both project designers and the public.

Based on the research conducted by staff, an assessment of County policies and practices, the results of the stakeholder workshop, and the additional input received from agencies and other stakeholders, the following recommendations are proposed to address the issues raised by this Motion.

Recommendation #1: The King County Department of Natural Resources and Parks (DNRP) and Department of Transportation (DOT) should immediately adopt, and update as needed, the proposed procedural standards to notify and seek input from stakeholders and to include full consideration of public safety issues in design and construction of all County-sponsored projects proposing placement of large wood in identified recreational waterways.

Recommendation #2: The King County WLRD should conduct a thorough review and update of its Guidelines for Bank Stabilization Projects in the Riverine Environments in King County to direct the consideration of public safety in the design and construction of future bank stabilization projects countywide. A scoping product, including a review of the existing Guidelines, identification of update needs, preparation of an updated outline for the Guidelines, and a detailed work program and schedule for completion of the update would be completed by June 30, 2008. A target for the draft product would be completed by December of this year, and the final updated document by June 2009.

Recommendation #3: The King County DDES should require that all project proponents assess and document consideration of recreational safety issues in projects which place wood in identified recreational waterways in unincorporated King County.

Recommendation #4: King County DDES should establish a policy requiring that any project authorized as an emergency measure be selected from an approved menu of action alternatives. DDES should develop a menu of actions alternatives that would minimize the adverse impacts on critical areas and public recreational safety. These actions are only intended to provide temporary relief and protection until the project providing a longer term solution can proceed through regular permit review. Policy amendments along with a limited menu of actions would be completed by June 30, 2008, and the full menu of action alternatives would be developed by September 30, 2008.

Recommendation #5: King County should promote increased awareness about the location of installed wood projects and river safety principles. This may include, but is not limited to: installing temporary or permanent informational signage at project sites, where appropriate; posting information on the DNRP web pages that provides descriptions, maps, and photographs of project sites; and supporting educational campaigns, sponsored by the Sheriff's Office and other organizations, in local schools and communities. This effort should be ongoing.

Excerpt from:

Report Addressing Public Safety in Placement of Large Wood in King County Waterways
King County Department of Natural Resources and Parks
Water and Land Resource Division, March 2008, Section VI, page 14

VI. CONCLUSIONS

King County is committed to providing many public benefits and services, including construction and maintenance of the public infrastructure; protection and restoration natural resources and ecosystems; recovery of endangered species; and provision of public safety. It is the responsibility of the County to seek ways to meet each of these obligations and to find mutually beneficial solutions.

The increased importance of placing large wood in local waterways is apparent in many public works projects. Wood is integral to fish and wildlife habitat restoration, flood protection facility design; and even road and bridge construction. However, members of the recreational boating community have expressed concern about the potential for large wood, depending on how it is placed, to heighten the risks inherent in water-oriented recreational activities. Therefore, it is essential that the County be very deliberate in how we place wood, so that we build structures that provide a reasonable measure of public safety. Implementation of a clear and transparent methodology for consideration of public safety issues in the design of future projects involving large wood placement is one of the most powerful tools for achieving the projects' desired functional outcomes and public safety. Further, adoption of a clear protocol will provide a level of certainty to both project proponents and recreational users.

Members of the recreational boating community have also requested assistance in finding ways to employ greater consideration of public safety issues in projects sponsored by other agencies as well as private individuals within King County. One way to reduce the likelihood that private projects would inadvertently create a hazardous situation is for King County to modify its permit authorities or policies to better inform and guide the designs alternatives and design considerations used by private project proponents.

Based on the success we have had to date in working collaboratively with the recreational community to improve recreational safety in the vicinity of the County's in-water projects, we can be confident that formally adopting the recommendations in this report will further enhance public safety and promote constructive dialogue in implementing the County's many important projects.