

January 31, 2007

To: Lower Columbia Solutions Group

From: Toxics Sediment Subcommittee

Re: **Recommendations on LCSG role in addressing toxic sediment issues**

In April 2006, the Lower Columbia Solutions Group (LCSG) charged a subcommittee with exploring the potential for a LCSG project to address toxic sediment issues. The subcommittee met in July and had a good initial discussion, identifying a number of potential action items for the LCSG to consider. In January 2007, the subcommittee met again to conduct a formal assessment of whether there is a role for the LCSG to play in addressing toxic sediment issues, and if so, what that role should be. The attached report provides the subcommittee's conclusions and recommendations.

Key Recommendation

In short, the subcommittee agreed that there is an appropriate and important role for the LCSG to play by leading the development of a Regional Upland Disposal Plan for toxic sediments. Managing toxics is a fundamental piece of managing sediment in general, and a Regional Upland Disposal Plan should be part of the LCSG's Regional Sediment Management Planning effort.

The subcommittee recommends that the LCSG

- designate the development of a Regional Upland Disposal Plan as a LCSG project,
- seek and allocate funding to support the project,
- organize a group of agencies and stakeholders to collaboratively participate, and
- appoint a convener for the team.

An initial assessment supporting this recommendation is provided on pages 3 through 5 of the attached report.

Lower Columbia Solutions Group Report from the Toxics Sediment Subcommittee

In April 2006, the Lower Columbia Solutions Group (LCSG) charged a subcommittee with exploring the potential for a LCSG project to address toxic sediment issues. The subcommittee met in July and had a good initial discussion, identifying a number of potential action items for the LCSG to consider. In January 2007, the subcommittee met again to conduct a formal assessment of whether there is a role for the LCSG to play in addressing toxic sediment issues, and if so, what that role should be. This is a report of the subcommittee's conclusions and recommendations.

Attendees

Scott McEwen, LCREP
Cathy Tortorici, NOAA
Mary Lou Soscia, EPA
Audrey O'Brien, DEQ

Peter Gearin, Port of Astoria
Lora Eddy, CREST/Port of Astoria consultant
Steve Greenwood, National Policy Consensus Center
Mikell O'Mealy, National Policy Consensus Center (facilitator)

Discussion of toxic sediment issues – roles for the LCSG

In July, the subcommittee identified four potential action areas where the LCSG could have a role in addressing toxic sediment issues in the Lower Columbia – regulatory, source control, mitigation and toxic sediment management. In January, the subcommittee revisited those areas, discussed the status of the issues, and agreed on recommended roles for the LCSG as described below.

Regulatory issues

Uncertainty remains about what standards the regulatory agencies will use to determine acceptable levels of toxics in sediments. The Army Corps of Engineers is now working with other federal and state agencies (NOAA, USFWS, Oregon DEQ, Washington DOE and others) to determine acceptable thresholds for toxics, and key issues are being raised to senior management in the agencies for fast resolution. The Regional Sediment Management Team (or RSET, a group of state and federal agency representatives) is also working on this issue. Resolving the uncertainty about what standards will be applied to toxics in sediment is vital to allow ports in the Lower Columbia to move forward with maintenance dredging.

- **LCSG role:** The subcommittee concluded that while we all want to see this issue resolved as quickly as possible, there is no role for the LCSG to play at this time. We should wait for senior agency managers to decide on thresholds for toxics in sediments, and then discuss the effects of those decisions on Lower Columbia stakeholders. The Corps or other agencies could provide an update to the LCSG on this at a future meeting.

Source control

EPA, LCREP, DEQ and others are taking significant, measurable steps to reduce sources of toxic chemicals throughout the Columbia basin. Over time, these efforts have the potential to eliminate many of the challenges that Ports are experiencing in managing the toxic sediments that deposit in the Lower Columbia River. Projects underway include collecting stores of legacy toxics such as DDT from farmers and orchardists, and working with key agricultural areas to adopt best management practices for current pesticide use (Hood River Basin, Mill Creek in The Dalles,

Walla Walla Basin, Pudding River Basin, Clackamas Basin and Yamhill Basin). It's likely that over 100,000 pounds of toxics have been kept out of the Columbia system through these types of efforts in recent years, and it's clear that eliminating sources of toxics is essential to relieving the burdens these chemicals pose to stakeholders and species in the lower river.

In September 2006, EPA designated the Columbia River Basin as a national priority river for restoration and toxics reduction. To achieve this goal, EPA, Oregon, Washington, Idaho and LCREP have committed to habitat restoration in the estuary and other areas, sediment cleanup in Portland Harbor and elsewhere, and source control projects to reduce contaminant levels in fish and water. This spring, LCREP will release a toxics monitoring report for the Columbia River Estuary (with funding from the Bonneville Power Administration) that will provide a basis for these efforts and inform future project development. EPA is also working with the states, tribes and LCREP to map various toxics reduction activities that are occurring in the basin to identify problems, priorities for future work, and information needs. In addition, DEQ recently completed a water quality improvement plan (or Total Maximum Daily Load, TMDL) for the Willamette River basin to reduce mercury in Willamette waters, and is now working with landowners throughout the basin to make positive changes.

- **LCSG role:** The subcommittee agreed that there is no direct role for the LCSG to play at this time, but it is important for the LCSG to stay connected to these source control efforts and remain informed and aware of what's happening. The LCSG should receive regular updates from EPA, LCREP and/or other agencies on this, because source control work focuses on problems in the estuary and lower river and how to address them. Potential future opportunities for LCSG involvement may include encouraging or endorsing certain source control activities, issuing letters of support for source control funding proposals, or strengthening the connections between lower river stakeholders and up-river users to build awareness of how source control work benefits the entire region.

Another reason for the LCSG to stay connected to source control efforts relates to how "emerging contaminants" are affecting the Lower Columbia River and the ways in which these contaminants may be regulated in the future. Emerging contaminants include pharmaceuticals, personal care products, household chemicals, agrochemicals, nanomaterials and other man-made compounds that we're finding in waterways, fish and other aquatic life, and that seem to be responsible for disturbing trends (see <http://email.asce.org/ewri/EmergingContaminants.html> for more information). How and when these contaminants will be regulated is uncertain, but Lower Columbia stakeholders will likely feel the effects of the regulation.

Mitigation

Last July, the subcommittee discussed a potential role for the LCSG in working with the Port of Astoria and other stakeholders on a habitat enhancement project to mitigate damage from previous toxic sediment disposal activities. At the time, the Port of Astoria was considering doing the project in lieu of recent fines levied by DEQ and the Corps, but the Port later decided not to pursue the project.

- **LCSG role:** The subcommittee agreed that without a local sponsor, there is no role for the LCSG in getting involved in habitat mitigation work at this time. In the future, if the Port of Astoria or other entity were to request LCSG involvement in building a collaborative effort to do habitat mitigation, the LCSG could consider endorsing a project and engaging various stakeholders in the work.

Toxic sediment management

Dredged sediments that exceed thresholds for toxics must be disposed at permitted upland sites, rather than disposal in flow lanes of the river. Upland disposal is many times more expensive than in-water disposal (roughly \$13.50 per cubic yard, compared to \$1.75 per cy for flow lane disposal) and finding appropriate upland disposal sites can be extremely difficult. Currently, each port operates independently in efforts to find and seek permits for upland disposal sites, and the costs associated with doing this can be nearly prohibitive, especially for smaller ports.

The need exists for a **Regional Upland Disposal Plan** that identifies shared upland disposal sites for toxic sediments, located in areas that make sense for the environment, nearby communities, and users (considering transportation and disposal costs). The ports, the Corps, regulatory agencies and other users could all contribute to development of the plan to address the regulatory, financial and community-interest issues related to upland disposal.

- **LCSG role:** The subcommittee agreed that there is an appropriate and important role for the LCSG to play in addressing toxic sediment issues by leading the development of a Regional Upland Disposal Plan. Managing toxics is a fundamental piece of managing sediment in general, and a Regional Upland Disposal Plan should be part of the LCSG's Regional Sediment Management Plan.

The subcommittee recommends that the LCSG designate the development of a Regional Upland Disposal Plan as a LCSG project, organize a group of agencies and stakeholders to collaboratively participate, and appoint a convener for the team. The subcommittee provides the following assessment in support of this recommendation.

Assessment of the Regional Upland Disposal Plan project

Appendix A of the LCSG charter establishes basic criteria for evaluating potential new LCSG projects. Development of a Regional Upland Disposal Plan meets all of the criteria, as summarized below.

Geographic location: The project is located within the Lower Columbia River area.

Sediment management: The project is directly related to dredge material disposal and sediment management, and should be an integral part of the Regional Sediment Management Plan.

Sustainability: The project would address economic, environmental and social objectives related to siting upland disposal sites for toxic sediments.

Added value of LCSG involvement: No other organization is addressing the need for a Regional Upland Disposal Plan, and the subcommittee sees LCSG leadership and involvement as essential to the success of this project.

Funding: Funding for this work should be sought as part of Regional Sediment Management Planning (i.e., congressional requests, foundations, Oregon Sea Grant, BPA and other sources).

Appendix A also provides detailed criteria for evaluating potential projects. The subcommittee discussed these criteria and provides the following information.

Key stakeholders, agencies and organizations to involve

Key parties to involve in the development of a Regional Upland Disposal Plan include the Corps of Engineers, Oregon DEQ, Washington DOE, the Ports and LCREP (which has information on existing disposal sites in the region). Other entities to include at some point in the process are NOAA, Oregon Division of State Lands, and local governments where potential sites are located.

Key issues to address

The project team will have to resolve a mix of regulatory, financial and community-interest issues, as discussed below.

- Regulatory – The team will need to determine what criteria will be used to select locations for upland disposal sites for toxic sediments. These criteria should consider ecological conditions, community concerns and economic costs of transporting sediments to the site. The team can also support the agencies in the regulatory process of siting the disposal facilities to address any issues that arise early-on.
- Financial – Significant costs are associated with securing upland disposal sites, dredging toxic sediments from the river, transporting the sediments to sites for disposal, doing maintenance and monitoring environmental impacts. One goal of a Regional Upland Disposal Plan would be to lessen the burden on all of the ports by pooling resources to address these costs and manage shared disposal facilities. The project team could develop options for reducing and financing these costs; for example, minimally raising port fees or charging a small tax on vessels coming into the river to pay for sediment disposal and restoration work, asking the state legislature to provide supplemental funding, and/or engaging up-river users in paying for some disposal costs.
- Community concerns – People have real concerns about the potential impacts of toxic materials on the ecosystem and nearby communities, and this is an issue that the project team will need to plan for. Providing timely, thorough information to interested communities can help people understand the issues we face with disposal of toxic sediments and why thoughtful regional planning is the best long term approach.

Getting started

The subcommittee agreed on the need to start laying the foundation for the Regional Upland Disposal Plan as soon as possible, given the significant disposal issues and costs facing the ports in 2007. Baseline information is needed to help define the scope of the problem, including:

- How many ports should be part of a Regional Upland Disposal Plan?
- How much toxic sediment material is dredged from these ports each year for disposal at upland sites?

- Which upland sites are these ports using now?
- How much toxic sediment material do the ports need to dredge in the coming year(s) that must be disposed of at upland sites?

In addition, the regulatory agencies, LCREP and others could start identifying potential criteria that should be used in siting upland disposal facilities – environmental conditions, community interests, transportation costs, etc.

This initial work could be done for \$5,000 to \$10,000, and the LCSG could consider allocating some of its existing funding to answer these baseline questions.

Funding

As noted above, the subcommittee recommends that the LCSG make development of a Regional Upland Disposal Plan a key part of the Regional Sediment Planning effort, and seek funding to support both projects simultaneously (i.e., congressional requests, foundations, Oregon Sea Grant, BPA and other sources). Potential sources of more immediate funding for starting work on the plan include:

- Seeking assistance from the state legislature to develop baseline information and identify siting criteria.
- Exploring the use of Oregon Economic and Community Development Department funding that is available for port marketing.
- Seeking support from the Oregon and Washington Governors' offices, which recently affirmed their desire to "fast track" work on regional sediment planning.

Conclusion and next steps

After considering many options for LCSG involvement in addressing issues related to toxic sediments, the subcommittee unanimously agreed that LCSG leadership is needed in the development of a Regional Upland Disposal Plan, as an integral part of the Regional Sediment Planning effort. If the LCSG endorses this recommendation, it could direct the subcommittee and/or staff to move forward with the following tasks:

- Baseline information – hiring a neutral researcher to collect baseline information to define the scope of the problem, as described above. Again, this could cost approximately \$5,000 to \$10,000.
- Interviewing participants – conducting interviews with key stakeholders, agencies and other participants to learn their interests and identify issues and opportunities.
- Plan outline – developing a draft outline for the Regional Upland Disposal Plan, which may involve research into other plans that may exist nationwide.
- Funding – exploring the funding options outlined above, in parallel with efforts to fund the LCSG's Regional Sediment Planning work.