



Sediment Cleanup Advisory Committee

October 28, 2011, 9:30 – 3:00

Ecology Headquarters in Lacey, WA

Facilitated by Tamie Kellogg, Kellogg Consulting

Meeting summary by Emily Santee and Kate Snider Floyd|Snider

In Attendance:

Ecology:

Toxics Cleanup Program

Jim Pendowski

Dave Bradley

Martha Hankins

Chance Asher

Pete Kmet

Laura Inouye

Russ McMillan

Water Quality Program

Cheryl Niemi

Floyd|Snider for Ecology

Kate Snider

Emily Santee

Advisory Committee:

Nina Bell – NW Environmental Advocates

Tim Brincefield – U.S. Environmental Protection Agency (USEPA)

Larry Dunn – Lower Elwha Klallum Tribes

Will Ernst – The Boeing Company (Boeing)

Kristy Hendrickson – Landau Associates

Mary Henley – City of Tacoma

Don Hurst – Colville Confederated Tribes

Lon Kissinger – USEPA

Lionel Klikoff – Department of Natural Resources (DNR)

David McBride – Department of Health (DOH)

Tom Newlon – Stoel Rives

Clay Patmont – Anchor QEA

James Rasmussen – Duwamish River Cleanup Coalition (DRCC/TAG)

Pete Rude – City of Seattle

Alex Smith – Port of Olympia

Glen St. Amant – Muckleshoot Tribe

Jeff Stern – King County

Dave Stone – Oregon State University (OSU)

Denice Taylor – Suquamish Tribe

McClure Tosh – Yakama Nation

Heather Trim – People for Puget Sound

Halah Voges – AECOM

Chris Waldron – Pioneer Technologies Corporation

Nancy Winters – HDR

Alternate, In Attendance

Brian Gouran – Port of Bellingham

Not in Attendance

Wendy Steffensen – North Sound Baykeeper

Mike Stoner – Port of Bellingham

Jack Word – NewFields Northwest

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Audience (per sign-in sheet):

- Tanya Bird – Washington State Department of Transportation (WSDOT)
- Keir Craigie – TetraTech
- Kathy Godtfredsen – Windward
- Brad Helland – Hart Crowser
- Johan Hellman – Washington Public Ports Association (WPPA)
- Pete Hildebrandt – Alcoc/WSPA
- Lincoln Loehr – Stoel Rives
- Lawrence McCrone – Exponent
- Bruce W. Rummel – Great Water Associates
- Naomi Stay – Confederated Tribes of Umatilla

Morning Session

- Introductions, Welcome from Jim Pendowski, TCP Director
- Presentation by Martha Hankins: SMS Rule Revisions and Ecology Environmental Objectives (presentation provided as handout)
- Input from Advisory Committee
- Input from Audience

Affiliation	Comment/Question	Ecology Response
Tamie: What are some concerns or questions you have about the parallel processes?		
Advisory Committee	Due to the complexities of the issues at hand it can be hard to formulate questions about the interplay between SMS standards and water quality processes.	
Advisory Committee	How does this SMS meeting inform or feed into the water quality process?	<p>In the near term, this meeting informs the water quality rulemaking process through discussions around fish consumption rates. The fish consumption rate process is a joint process between TCP and WQP.</p> <p>Ecology is working more closely with the WQP now. The goal is to make the two programs' approach more consistent and coordinated.</p> <p>There will be two phases in the process for updating water quality standards: the second phase will center on human health.</p> <p>Discussion around fish consumption rates will influence the water quality process but will not dictate the events and proceedings of the water quality rulemaking process. Water quality updates will be a separate effort</p>

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		with its own public process.
Advisory Committee	<p>Cleanup and source control actions to reduce regional background and watershed wide concentrations are two specific instances where efforts to update the surface water quality standards and the work on SMS standards need to go hand in hand. However, SMS has a bigger stick (better enforcement ability) than water quality does.</p> <p>Yet these two processes are not working or being developed in tandem – the water quality process is second, and doesn't really take effect until 2013. So they aren't really parallel processes-they are sequential. I would urge the processes to be treated in parallel rather than sequentially.</p>	
Advisory Committee	<p>For water quality implementation tools – what is the process? What is the scope and interplay of the two processes?</p>	<p>Updates to the surface water quality standards have been part of a scoping process that included the Water Quality Partnership, a standing committee that meets regularly with Ecology staff. Ecology will coordinate getting all meeting announcements for all processes (including water quality, fish consumption rates, and SMS updates) to the stakeholders and other interested parties.</p> <p>The Ecology Water Quality Program is holding a meeting on December 13th from 9:30 to 4:00 at the Lacey Community Center.</p> <p>Ecology will send an announcement out next week with this information.</p>
Advisory Committee	<p>Both the Water Quality Program and Toxics Cleanup Program are looking at fish consumption rates, but by definition these groups have two different goals. How will the divergent goals of the two groups be remedied in order to come up with a consistent and singular decision? Or will divergent goals result in differing rule language? This can't be a one size fits all solution because there are many different issues at hand, including freshwater, marine, and anadromous species.</p>	

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<p>Advisory Committee</p>	<p>What are the three processes that Ecology mentioned earlier?</p>	<p>The three processes that Ecology is working on and talking about are:</p> <ol style="list-style-type: none"> 1. The process to determine Fish Consumption Rates, which is ongoing 2. SMS Rule Revisions – going on now 3. Water Quality Rule Revisions <p>There are two steps in the Water Quality Rule Revision process:</p> <ol style="list-style-type: none"> 1. WQP Rule Revisions regarding Water Quality Implementation Tools 2. Developing new Washington-only Water Quality Criteria based on protection of human health
<p>Advisory Committee</p>	<p>After participation in the Oregon process, what is the definition of implementation tools? Implementation could be everything from non point stormwater sources to ... and others. If this broad definition of implementation is used, then separating the process into two separate steps makes sense.</p> <p>If, on the other hand, you follow Oregon’s process with suspended implementation (which allows for “loopholes” or “regulatory flexibility”) as the definition of implementation, a two step process doesn’t make sense once the fish consumption rate is chosen.</p>	
<p>Advisory Committee</p>	<p>This is a comment focused on sediment.</p> <p>Generally speaking we’re here to provide input on the framework of the rules, but I do want to stress that it’s impressive how much thought has gone into the packet and how much of the input from previous SMS meetings has already been incorporated and addressed in this packet. Still, I am curious:</p> <ol style="list-style-type: none"> 1. How does this rule actually work once we let it go? 2. Has the sediment impact zone that 	<p>In response to the second question, yes, we absolutely want these meetings to focus on implementation, especially with regard to what do we need to do to make these rules work, including how do they work? Please give feedback to ensure that the implementation of rules can and will occur. We do need to have other rules and processes in place before this process can be</p>

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	<p>years back we worked so hard to develop actually been used? Will the other things that we have worked to create go unused or unimplemented? Should we think about how implementation occurs or should occur as part of this meeting process?</p>	successful.
Advisory Committee	<p>Source Control is vital for the long-term success of the SMS rule revisions. How will source control be integrated and coordinated with the SMS Rule Revision process, not just in nebulous future processes?</p>	We'll talk in more detail about source control at the November and December meetings.
Advisory Committee	<p>The language in the rule about source control is weakened by using words like "may" and "can" instead of more definitive language.</p>	
<p>Tamie: What are some issues that you would like to talk about at future meetings?</p>		
Advisory Committee	<p>I'd like to talk about regional background – how do we figure out what goes into regional background, what data do we use to determine regional background, who pays to get data for developing regional background, how much information do we need, does this value change over time, how does it affect individual cleanup units, how is regional background used by the second and third parties doing a cleanup, not just the first?</p>	
Advisory Committee	<p>I'd like to talk about site units – how are they defined, how do they contribute to larger areas and how can individuals cash out for bay-wide cleanups?</p> <p>How is liability assigned after a party has cashed out, particularly with respect to recontamination?</p>	
Advisory Committee	<p>There is a glaring hole – environmental justice is not talked about in the framework or the rule even though those impacted are environmental justice communities. The poor eat a lot of fish. Tribes eat a lot of fish. We need to identify this issue in the rule somehow.</p> <p>How can we identify this problem with sediment and water quality standards, particularly with respect to bioaccumulation... Where are we now and</p>	

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	how do we know when we're getting better?	
Advisory Committee	I think it's important to identify what belongs in the Rule versus what belongs in guidance. When Ecology is a bit unsure on an issue, don't put it in the Rule where it's hard to change.	
Advisory Committee	We've come a long way over the past year in developing this framework but we need to spend 75% of our time focusing on the three big issues: source control, regional background, and site units. These three issues are the most important issues to clearly identify what gets put in the Rule versus guidance.	Ecology conducted an informal survey of the Advisory Committee to see if these three issues were the most important three to focus on – about half respond yes.
Advisory Committee	There are language problems throughout the text that have broad implications because of small word choices. There needs to be a process for this group that would target the specific rule language that would impact how the rule is actively carried out, since the devil is in the details. Until people identify these problem word choices, we won't know if the rule can actually be successful. There may be too many of these issues to address within the time constraints of these three meetings.	
Advisory Committee	I thought the goal of this process was to allow us to use our own sites to see if this language in the rule would be effective, to identify what are the strengths and weaknesses of the rule. We should use our sites as case studies to see if the rule would work, then come to the next meeting ready to discuss these issues.	
Advisory Committee	As a group we should think of real life examples—places with and without data, with and without environmental justice communities—to make the conversation more real and less conceptual.	
Advisory Committee	Even small language issues (the difference between “may” and “shall”) can lead to litigation, so we need to bring language issues to the group.	
Advisory	There are lots of folks here from the Western	

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Committee	side of the state, but we can't forget the East side of the state when developing case studies, which has freshwater rivers—a very different animal from the embayments found on the Sound.	
Advisory Committee	How do other state programs think these standards will influence them (i.e., what does the representative from the Department of Natural Resources [DNR] think that the effect of the new standards will be on DNR policies)? We need to hear from other agencies directly.	
Advisory Committee	<p>What is the economic impact of our decisions (e.g., costs associated with regional data collection) and where does the money come from?</p> <p>Cost analysis should be ongoing, not just something that is saved until the end. We could look at the costs associated with decisions made with respect to each topic.</p> <p>Many times we need to look ahead at cost during initial discussions. We could split off time at each meeting to discuss cost.</p>	
Advisory Committee	Cost and liability splits are key issues. How do we do source control actions cost effectively?	
Advisory Committee	We need to consider the implications of not meeting requirements and/or not taking action, particularly with respect to tribal and commercial harvesters.	
Advisory Committee	Can Ecology send rule language in Word for us to edit with suggestions and send back?	
Advisory Committee	<p>Total Maximum Daily Loads (TMDLs) are unlikely to play a role in this process initially – but without TMDLs it's impossible to evaluate success. We need to add the cost of TMDLs in to the discussion of what it takes to do source control and remedies.</p> <p>There are two options when doing source control – either you can do them willy nilly or with an idea of what are the key contributors and how to methodically reduce contributions. TMDLs are the way to approach source control in a methodical way, which is particularly necessary to determine accountability.</p>	

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	<p>Cost of TMDLs is a big issue, especially with the huge backlog of TMDLs already in the state.</p> <p>TMDLs and their cost need to be on the agenda – we need to decide if they are a state or business responsibility (or some combination) because the reality is that there are arguments for both.</p>	
Ecology	<p>There are many questions around institutional controls that still need to be addressed – what is their role and how can we strengthen them and focus on implementing effective institutional controls.</p>	
Advisory Committee	<p>We also need to determine how long do institutional controls last versus how hard we need to work on source control.</p> <p>These things can't last forever in a practical sense, but conceptually they might well have to.</p>	
Advisory Committee	<p>Ecology's Water Quality and Toxics Cleanup Programs don't interact as much as they should. We need a standard in place for integration.</p> <p>TMDLs play into integration between the two programs – Ecology needs to increase its focus on TMDLs.</p>	
<p>Tamie: The need for case studies has been mentioned. Ecology will talk about what they were thinking about with respect to case studies. We may pull in some of the Advisory Committee members to help.</p>		
		<p>At first we looked at conceptual examples. We moved quickly to using real data. Chance has been working to look at data and walk through different case studies at various cleanup sites. Under the new framework what does a cleanup look like, and where do we end up for each type of site?</p> <p>We'd like input on what our case studies should look like. We have some data regarding regional background, site data, etc. We then looked at how site units would be determined, etc. This is a hypothetical case study that uses real data – it is not a case</p>

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		study about a specific real embayment. We plan to present results at the November meeting. Our goal is to send out case studies about a week prior to the November 18 meeting.
Advisory Committee	Could you show us a list of case study sites? The site(s) selected make a big difference – are they representative of a full range of sites? Are they sites with robust data? Are they difficult sites to evaluate because of nuances in their surroundings?	<p>We've tried to use data in its raw form to represent a hypothetical embayment instead of tying data to current or ongoing cleanup sites. We've looked at data from almost every site in the region – Bellingham, Elliot Bay, Port Gamble, Columbia River, and many others. Wherever data was dense enough to be of use, we kept it for use in GIS site modeling.</p> <p>However, we still need to layer in the decision making process now that we have data, in order to tease out questions about sources—the difference between natural and regional sources.</p> <p>We also need to hear your questions and comments in order to build them into the case studies.</p>
Advisory Committee	Will these case studies shed light on freshwater sites? How will freshwater sites be treated?	We're doing our best to evaluate freshwater sites. We have limited freshwater data.
Advisory Committee	You mention that you are trying to use data without revealing what site it is from. But even data with “blurry” identification would be helpful. Is November 18 th the first time we will see the results?	We want to have a discussion on the case studies at the November 18 th meeting, but we can have a few people help discuss the sites and their issues prior to hearing about the results at the November 18 th meeting. Our goal is to send out case studies about one week prior to the meeting.
Advisory Committee	My concern with case studies is where we end up – how does the end game play out? The situation that we're leaving some of the jurisdiction issues in is precarious.	Examples of tradeoffs and the concerns of the Advisory Committee will be highlighted and discussed more effectively if we have case studies we can look at in detail.
Advisory Committee	I think we should look at one or two case studies in great detail, rather than at a lot of	We are using real data but are creating a hypothetical situation.

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	<p>case studies that have not been well developed. We need to look carefully at regional background, site units, and other important nuances.</p>	<p>Our plan is to have one case study that we look at in great detail – but maybe we'll have time to develop a second.</p>
Advisory Committee	<p>I think it's important to develop and look at a case study for each of the three types of sediment site – one for a freshwater river, one for an estuary, and one in the Puget Sound in order to be representative.</p> <p>We don't want to do only the first half of data analysis. We have to look at all three types in order to determine strengths and weaknesses of the Rule.</p>	
Advisory Committee	<p>This is a clarification question – what do you mean the case studies are both real and hypothetical?</p>	<p>We have some real, robust data, but in other areas there are still data gaps. We'll be using data from other sites for our case studies to supplement existing data if needed. So all the data is real, but the way it is used makes the site evaluation in case studies hypothetical.</p>
Advisory Committee	<p>I think we should put data up on the board for all sites, then use the lack of data in Elliot Bay, for example, to look at how that site would be treated as it moves through the process. We can determine how each site would be treated in a general sense at the meetings, since we have a finite number of sites in the state.</p> <p>I understand the importance of case studies but also think we need to identify which sites will fall into each category outlined in the rule making process.</p>	<p>Dave Bradley agreed later in meeting to evaluate this concept with Heather Trim before the next meeting.</p>
Advisory Committee	<p>To clarify – what will actually be produced by Chance's group?</p>	<p>Chance will be working to create a GIS map that can be used to walk through the steps in the proposed rule to identify site units, define regional background, etc.</p>
Advisory Committee	<p>My question has two parts. When looking at cleanup levels will you be looking at fish consumption as the indicator of risk?</p> <p>So you want to look at fish consumption only, not any of the other exposure parameters that can affect risk determination?</p>	<p>Policy is not yet set for other exposure parameters, but will be in guidance.</p>

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Advisory Committee	Dioxin risk-based values are one to three orders of magnitude lower than the lab can attain. How does recontamination and ongoing responsibility play into dioxin cleanups?	
Audience Input		
Audience	We need to look at incremental risk and tiered risk compared to background, site specific risk calculations based on site specific fish consumption rates, and other issues. These should be added to the analysis done for the case studies.	
Audience	Bumping up against the issues of environmental justice and cost there are bigger questions of priority – who compromises and how much? What is the highest priority? How can we get from the SMS Rule to “big picture” guidance? What goes on internally with the cleanup sites going on now – are we in limbo waiting for the new rule to take effect?	The MTCA rule has a grandfather clause similar to what we will use here for ongoing sites. If a Cleanup Action Plan (CAP) based on the current rule is in place, it will remain as is. New CAPs developed after the rule revisions will use the updated rule.
Audience	Water quality, stormwater, TMDLs and SMS cleanup levels have overlap or “grey areas” that will need to be sorted out somehow.	
Audience	Freshwater issues are very important to tribes along rivers.	
Tamie: Request for Advisory Committee volunteers to work with Chance on case studies?		
Volunteer group for case study work: Chris Waldron, Pioneer Technologies Alex Smith, Port of Olympia, Clay Patmont, Anchor QEA Don Hurst, Colville Tribes		

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Afternoon Session		
<ul style="list-style-type: none"> - Presentation by Chance Asher: SMS Framework Overview and Objectives (presentation provided as handout) - Input from Advisory Committee - Input from Audience 		
Affiliation	Comment/Question	Ecology Response
Advisory Committee Questions and Comments re: Chance Presentation		
Advisory Committee	Regarding the “default” fish consumption rate, I had assumed that the default rate in the state would be a low fish consumption rate, and different site specific rates could only be raised as applicable, similar to how background has a single default that acts as a baseline statewide. But from what you said in your presentation it sounds like the site specific fish consumption rate could be higher or lower than the default consumption rate.	Yes, the concept is that site specific fish consumption rates could be either higher or lower than the default rate.
Advisory Committee	Are you factoring in the relative source concentrations to the diet fraction?	Updated policy is not yet set for other exposure parameters. A rough Human Health Risk Assessment guidance document exists. The goal is to have it finished by the time the rule is promulgated.
Advisory Committee	It sounds like Ecology’s definition of regional background will change over time, which makes cleaning up to regional background a moving target.	Yes, we do expect that regional background should decrease as time goes on, as non-point sources contributing to regional background are reduced.
Advisory Committee	Is there language in the rule to address the statement that “PLP(s) must continue to improve BMPs as technology advances, to achieve Sediment Cleanup Objectives over time”?	Don’t believe this statement is specifically incorporated into the rule, but will check.
Advisory Committee	On the source control issue - how will this play into permitting to meet cleanup standards? How will permits address COCs not already covered by stormwater permits? Who will review and approve permits, and how often?	Ecology has written permits for cleanup sites, so that’s one option that’s available.
Advisory Committee	What is the role of monitored natural recovery (MNR) versus active cleanup? Is the 10 year goal measured from the start of the cleanup or after the cleanup is finished? What is the rationale for the 10 year rule?	MNR could be included as part of a Sediment Recovery Zone, not as an action done on its own. MNR needs to be one of many actions undertaken at a site.

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Advisory Committee	<p>There are some sites where MNR is the best and truly the only viable option. Dredging or capping actions at some sites can do more harm than good, and other active remedies can also pose problems or may not be feasible. There needs to be some recognition of MNR as a viable “active” remedy at these sites.</p> <p>Additionally, meeting cleanup goals in 10 years is not always feasible. Most of us are thinking that the 10 years will be after the active cleanup action takes place.</p> <p>The rule and packet are inconsistent as they are currently written regarding the 10 year rule. We need to change the Rule to specify that the 10 years should begin after the active part of the remedy is completed.</p>	MNR is not considered an active remedy, but enhanced MNR is considered an active remedy.
Advisory Committee	<p>I understand that there is a near-term provision in the rule for settlement of liability and covenants not to sue – but what about restoration of damages? Would the covenant not to sue preclude recovery of those funds? What does that mean for natural resource damages (NRD)?</p> <p>Ecology needs to take a larger role in recovering NRD funds.</p> <p>Ecology has already taken steps to improve their ability to recover NRD funds from a legal perspective.</p>	NRD recovery will take place separate from the SMS Rule Revision process, and is not precluded by cleanup settlement. We agree NRD is important. We hired a new employee at Headquarters explicitly for recovery of NRD funds.
Advisory Committee	How do the two tiers (in powerpoint figure “Near Term Risk Reduction – Establishing Cleanup Standards”) incorporate non-cancer effects?	We will keep the methodology previously developed, which uses the hazard quotient of 1 as described in the packet for both tiers. For the upper bound, 10^{-5} will be used as the individual and total risk level.
Advisory Committee	How do the 10^{-5} and 10^{-6} cancer rates interact?	The 10^{-5} risk level is for the total site’s risk. This was modeled after the Method C risk approach.
Advisory Committee	Fish consumption advisories are institutional controls that Ecology needs to consider and include in its evaluation of institutional controls and site specific values – although these are done by the Department of Health and not Ecology.	
Advisory	By putting site unit settlements in the Rule	Please suggest language that

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Committee	rather than in guidance Ecology is really tying their hands. The definition of “highly contaminated” may restrict Ecology’s ability to settle.	would help us avoid this issue
Advisory Committee	If regional and natural background are often the same, how do you expect concentrations to decrease over time?	
Audience	On slide 6, if you exit to the right as “no – no site units” then the PLP is part of a larger site. What is the course of action if a PLP is part of a larger site?	If the PLP is part of a larger site, there could be many different possible actions, including conducting a cleanup as part of a larger group.
Audience	Can you define the 10^{-5} site risk? Did you consider using 10^{-4} for multiple carcinogens? Puget Sound has a cumulative incremental risk set to 10^{-4} – how does using 10^{-5} as total site risk fit into Puget Sound’s cumulative risk approach? Have you considered an incremental approach – require incremental improvements above existing conditions.	MTCA method C’s 10^{-5} site risk is the overall site risk level for either individual or total carcinogens. Using a 10^{-4} cancer risk is outside of what is acceptable for Ecology at this time.
Audience	Have you considered these issues as they relate to freshwater rivers?	The discussion we’ve been having includes freshwater sites even though we have been saying “embayment” or “bay-wide.” We also talk about “watershed-wide”.
Advisory Committee	Can you explain the differences between MTCA area background and this rule? Why are you deviating in this rule to create a regional background?	We started the Rule Revision process with the goal of harmonizing MTCA and SMS. We wanted to stay conservative, but find a type of background that could work for sediment sites and allow for settlement to occur. Theoretically, depending on how MTCA is interpreted, MTCA’s area background could include specific individual sources in the determination of background, and we didn’t want to go there. So we created a regional background that does not include individual sources in the determination of background.
Advisory Committee	How is this consistent with MTCA?	The MTCA statute says that MTCA needs to be at least as stringent as federal laws, including the Comprehensive Environmental

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		Response, Compensation, and Liability Act (CERCLA; the Superfund law).
Advisory Committee	What is the process for how sources of phthalates (for example) will be addressed if we can't control them? How is this consistent with the outcomes of the Phthalate Work Group?	We won't settle with you if you can't meet your cleanup standard. Ecology will set a site specific cleanup standard as close as practical to the sediment cleanup objective, taking into account cost, net environmental effects, and technical feasibility. Using these factors in addition to the regional background concept allows consistency with findings of the Phthalate Work Group.
Advisory Committee	In situations where regional background is close to natural background, short of capturing and containing all stormwater, what can you do to meet the specifications in the Rule? Can we give specific examples where cleanup levels are being restricted?	
Advisory Committee	<p>If active cleanup for both a localized area and the whole bay is greater than natural background, we need to be able to get the cleanup action done.</p> <p>If you are an industry in a large bay, you don't want to do a cleanup if there may be recontamination and consequently you may be pulled back into a cleanup after you've already made a significant capital investment.</p> <p>Other site owners may be worried that if they step forward to get their portion of the cleanup done, that they may be held accountable as the only liable party.</p> <p>The existence of the rule itself won't be enough to encourage cleanup to take place – there needs to be personal interest like improving navigation channels or selling the site in order to incentivize a cleanup to take place.</p>	
Tamie: Are you seeing disconnects between the rule and the framework?		
Advisory Committee	Regional background and site units by definition "can't be related to discrete sources." How would that work related to stormwater discharge as a point or non-point	

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	source?	
Advisory Committee	With respect to liability, we need to address how long the site has to be in compliance before a cleanup is considered final. If a site is clean during every monitoring event until the very last sampling event at the end of the 10 year monitoring period, would their cleanup now be considered interim instead of complete?	
Advisory Committee	Regarding getting from site specific cleanups to bay-wide cleanup – where is the process referenced in the rule? Once you switch to a bay-wide process, how does the process work? This is unclear to me. Does the process apply to any cleanup in the future whether the cleanup was done for a site unit or an isolated exceedance?	
Advisory Committee	Looking at the second bullet on the first page – flexibility for PLPs to settle liability is missing from the framework. I think this language needs to be fleshed out in more detail in the rule. One obvious one is about embayments within urban environments. The framework is lacking specifics on source control. You could expand the jurisdiction of permanent stormwater source control under NPDES permits. You could expand the role of TMDLs to tell you who is responsible for what sources. You could also use TRI data to identify atmospheric deposition sources. You could identify state laws to decrease air pollution that is not already covered by the Clean Air Act.	
Advisory Committee	We're making the process so complicated that it's hard to see the big picture. We can't solve every problem at these meetings. The Rule obviously needs some work but the framework is good. The rules don't mesh very well with the framework right now – it definitely looks like there has been more thought put into the framework than the Rule.	If you can point out areas of the rule that get us to where we need to go to match the framework, that would be helpful.
Advisory Committee	Source control is important in the framework and for discussion at the next meeting, but these meetings won't really talk about source control implementation. It seems like we're just paying source control issues lip service. We need to either talk about it in	

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	<p>detail or take it off the table completely. But it is disrespectful to not talk about the details pertaining to source control if we recognize it is a major issue. We could even benefit from making source control have its own process.</p>	
Advisory Committee	<p>Regarding site units, we need to state in the rule that Ecology expects to settle with both larger and smaller sites, and leave it at that without looking at whether or not it's a hot spot or how big the area is. If someone only has the finances to clean up five acres, let them clean up five acres. If someone else wants to clean up 20 acres, let them – but don't tie Ecology's hands by defining units so strictly in the Rule.</p> <p>Do we want to define specific sources in regional background? I don't know how specific the Rule should be. Similar to source control – how much of this should really be in the Rule?</p>	
<p>Tamie: Do you have concerns regarding the framework?</p>		
Advisory Committee	<p>Why not just have Ecology offer a definition of source control? Define which source control issues matter in our discussions and our process on this committee.</p>	
Advisory Committee	<p>There is a disconnect between site units and cleanup areas. Site units are defined two dimensionally, while cleanups into sediments are "3D." In the Rule/framework there is no mention of the "biological active zone." My concern is that the 10 centimeter (cm) biological active zone is not sufficient, and also that how deep the biological active zone extends is also a moving target. Sediment environments are dynamic. The 10 cm biologically active zone could easily be buried or scoured away after sediment cleanup, so more thought needs to be put into the definition of the biological active zone.</p> <p>Additionally, the site specific definition of the biological active zone is important. If there are no macro invertebrates currently in the sediment because of contamination, we shouldn't use that as the basis to define the active zone as 0 cm.</p>	<p>Please suggest language that you think would address these concerns.</p>
Advisory	<p>Predictably determining PLP base for sites is</p>	

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Committee	important. For example Elliot Bay storm drain and CSO owners are PLPs but others are not. Inconsistency is a problem that extends to site unit definitions.	
Advisory Committee	The issue of recontamination is one of the most important issues. This group won't be able to handle all source control issues. Some source control issues will have to be done under the Water Quality program. We will only provide input on source control, since our goal is really more about cleanup instead of source control.	
Advisory Committee	Please provide a copy of the framework in Word in addition to offering a copy of the Rule in Word.	
<p>Tamie: Is there a specific issue that you want to bring up with respect to changes to framework or the Rule? Are there any issues that struck you as particularly important to address?</p>		
Advisory Committee	The framework explains the issue well, and captures the discussions we've been having over the last year. I think the most important thing to revisit is the liability issue – the language issues regarding recontamination potential. This is especially complicated for an owner like a Port with tenants.	
Advisory Committee	<p>The biggest issues for me are background and source control. We need to address these issues in ways that are acceptable to most of the group. Permitting is a huge issue because if the permit exists and is allowing you to discharge at levels that are too high, you won't get anywhere. Most NPDES permits also don't address COCs at different sites. Maybe the Toxics program should do permits.</p> <p>Regarding CSO's –the permittee is the one that's responsible. Other contributors could also be responsible. It's not clear how it's done here.</p>	
Advisory Committee	We need to be thoughtful about the definition of marine, estuary, freshwater, etc with respect to salinity. The jurisdictions, rules, and standards that are applied to a site depend on its classification.	
Advisory Committee	Contaminated porewater affects critters, not just sediment. But in the Rule it's not clear if porewater is treated as surface water,	

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	groundwater, etc. We need to address how porewater is treated in the Rule (or guidance) and why we are choosing to treat it that way.	
Advisory Committee	This is a process comment – it might help to get a better understanding of the framework before we delve any deeper. Which parts of the framework become Rule, which are put into guidance, which are used only in internal discussions. Without that clarity, we can't tell what is intentionally or unintentionally omitted from the Rule.	
Advisory Committee	I think we need to be focusing the majority of our time on the Big Three issues (regional background, source control, and site units). The case studies will help a lot.	
Advisory Committee	This is a constructive process. Most of the time these processes are closed. Source control is discussed in private and using language that is difficult to understand by outsiders. We need to keep the discussions open, making sure to involve the public and use language that they can understand, so that the public understands the impact that they can have with respect to non-point sources.	
Advisory Committee	More source control questions are brought up by the framework than the framework helps answer – how will coordination between programs and within programs occur? It's still not clear how Ecology wants us to address or comment on source control. For example the framework discusses "well defined agency wide measures" but currently these measures are ill defined and won't actually succeed in doing what they are intended to do.	
Advisory Committee	The most important issues to me are recontamination, liability, and how these are defined. Source control levels are also important – how are they set to prevent recontamination? If there is a consent decree on a unit, how will input from other PLPs be used in the process?	
Advisory Committee	The fish consumption rate in MTCA and SMS is great, but until we establish background and site units a crutch still remains, which prevents us from achieving a	

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	workable rule.	
Advisory Committee	Site units, regional background, source control, and recontamination are big issues for me. I want to work on the disconnects in the regulations with respect to these issues. Additionally I think we need to address how implementation by the Agency will occur.	
Advisory Committee	The framework is good but getting it to work like we want it to is tough. The regional background concept is good but how will it work? Source control and other issues are also difficult to translate into the Rule or guidance.	
Advisory Committee	The framework is good and consistent with past discussion. But we need to stay focused on major issues. We need to make sure we don't rewrite aspects of the Rule that aren't broken.	
Advisory Committee	With respect to the upper-bound on sediment cleanup and the flexibility that Ecology has on effects-based parameters, can we make that guidance and not law, especially fish consumption and levels that will protect human health? Fish consumption is important but hasn't been discussed very much so far, particularly with respect to how to treat consumption of anadromous fish.	
Advisory Committee	It would be helpful to have Jim Pendowski (Toxics Cleanup Program Manager) and Kelly Susewind (Water Quality Program Manager) both in the room together so we can ask questions and understand how these programs will actually work together. I'm also looking forward to seeing the case studies to help put meat on the issues.	
Advisory Committee	Human Health Risk Assessment guidance is important and I feel like I'm missing it. I need to understand how they interplay. Source control translates to permitting a discharge but groundwater and erosion should also be considered when looking at recontamination.	
Advisory Committee	Coordination between source control and ground water is important. We need source control to be effective. We need to understand the relationship of	

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	<p>liable parties to overall bay cleanups – for example what is DNR’s obligation and how long does it last? (The same question applies to private parties.)</p> <p>How do we deal with people who want to clean up and get out?</p>	
Advisory Committee	<p>We need to achieve focus and prioritize – I’m not trying to be dismissive, but we need to recognize that not all issues are as important as issues like site units and regional background.</p>	
Advisory Committee	<p>My concern has to do with measurement – how do we make criteria well defined, how do we tell who is contributing and how much? Just getting to the Rule requires us to have consensus on measurement.</p> <p>How are regional concentrations measured relative to a cleaned up site? The region needs to answer that question, not the person doing the cleanup. We need to have a metric to determine if a site was successfully remedied and kept clean.</p>	
Advisory Committee	<p>Ecology is building a “car” based on specs we provided, now it’s up to us to actually “test drive” it. We can do this with the case study. But we all have homework – we need to run our own sites through the Rule to see how it works, come back with suggestions on how to fix the Rule in order to end the process with a workable Rule.</p>	
Advisory Committee	<p>The framework is good, but the next step is to make the Rule language clear. To continue the car metaphor, we need to look at the car after 30 years and 200,000 miles – the end game for sites, not just as it would apply to our current conditions.</p>	
Advisory Committee	<p>How does source control relate to background, how do you pick an area and select data to use for background, etc.</p> <p>Fish consumption is also important – state waters or site specific.</p> <p>Institutional controls are needed even if we have to work with DNR or others to establish them.</p>	
Audience Input		

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Audience	It seems to be the idea that we know how to transfer fish consumption rates to an acceptable level of contamination in sediment, but this isn't true for all types of contaminants. Arsenic and other chemicals don't bioaccumulate in the same manner as other carcinogenic substances, so they shouldn't be subject to the same type of modeling.	
Audience	It feels like we're headed towards cleaning up to background, but I would stress that there are human health risk-based levels that are unworkable because background is higher than these human health based risk levels.	
Audience	There are places where depositional sediment could pose a problem, simply because sediment is dynamic, which makes it hard to identify the true source of sediment contamination at times. There's a lot of financial, legal and scientific uncertainty as cleanup concentrations are lowered. The timeframe to achieving a clean site gets longer. PLPs are less likely to contribute. We need to consider ongoing source control, active cleanup, and other options to help reduce uncertainties.	
Audience	I just wanted to complement you on the process that you've created. It seems to be very effective so far.	
Audience	I have a concern with the emphasis on risks associated with fish consumption that are isolated from other items that people typically eat, like red meat dishes. Smoked salmon PAH levels could easily be higher than the acceptable limit simply because fish can't metabolize PAHs once they are dead, and smoking fish over an open fire contributes a lot of PAHs to the fish.	
Audience	Concerning MTCA's language regarding source control to the "maximum extent practicable" – I assume this language implies that source control is evolving and therefore source control to the "maximum extent practicable" should be put in guidance. Letting people have input into the process can result in too many dueling	

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	interpretations, so be careful about receiving too much input. Instead, solicit input only when it is needed.	
Chance Asher stressed that Ecology wants specific suggestions on how to make the rule better and improve rule language.		
Dave Bradley requested advisory committee volunteers for a Source Control discussion that would help identify suggestions about what should go into source control rule language or guidance, and could provide input on how to coordinate the source control issues in this committee process. Volunteers include: Will Ernst, Boeing Kristy Hendrickson, Landau Nina Bell, NW Environmental Advocates Larry Dunn, Lower Elwha Klallam Tribe Mary Henley, City of Tacoma Heather Trim, People for Puget Sound		