



# **RESPONSE to COMMENTS**

## **Draft Remedial Investigation and Feasibility Study Report**

**I & J Waterway Site  
Bellingham, Washington**

**February 2, 2015**

**WASHINGTON STATE DEPARTMENT OF ECOLOGY**

**TOXICS CLEANUP PROGRAM**

## **1. Introduction**

On October 30, 2014, a draft Remedial Investigation and Feasibility Study (RI/FS) report for the I & J Waterway cleanup site was issued for a 30-day public comment period. The public comment period closed on November 28, 2014. Public involvement activities related to this public comment period included:

- Distribution of a fact sheet describing the site and requesting review of the draft RI/FS, through mailing and emailing to approximately 1756 people, including neighboring businesses and other interested parties;
- Publication of a notice in the Washington State Site Register, dated October 30, 2014;
- Publication of one paid display ad in *The Bellingham Herald*; dated October 30, 2014;
- Announcement of the public comment period and posting of the documents on the Department of Ecology (Ecology) website at:  
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2012>
- Providing copies of the documents through information repositories at Ecology's Bellingham Field Office and Northwest Regional Office, and Bellingham Public Library-Downtown Branch.

A total of ten persons/organizations submitted written comments during the comment period. Comment submitters are listed in Table 1. Section 2 of this document provides background information on the Site, and Section 3 presents next steps for the cleanup. Section 4 lists the comments received and Ecology's response. Appendix A provides the original comment letters as received.

**Table 1. Comment Submitters**

1	Monte Hokanson
2	Darrel Weiss
3	Dale Petersen
4	Louann Chapman
5	Gaythia Weis
6	Terry Montonye
7	Judith Akins
8	Pam Borso
9	George Dyson
10	RE Sources

## **2. Background**

The I & J Waterway cleanup site is located at 701 Hilton Avenue on the Bellingham waterfront. Environmental investigation of the site showed contamination in the marine sediment. Contaminants included nickel, phthalates, phenols, and polycyclic aromatic hydrocarbon (PAH) compounds. The contaminants are associated with shoreline industrial activities of former owners and tenants including: lumber mill operations, rock crushing, and food/seafood processing. A historic building fire may also have contributed to the contamination.

Dioxins/furans and mercury were also found at the site. Dioxins/furans are present throughout Bellingham Bay from multiple sources including former pulp and paper mills and wood treating operations; and on-going burning activities. Mercury is associated with past discharges from the Georgia-Pacific Pulp Mill, formerly located to the south of the I & J Waterway.

### **3. Next Steps**

Ecology has reviewed and considered all comments received during the public comment period on the RI/FS report. The comments are presented below in Section 4 with Ecology's response.

Modifications to the RI/FS report were made as a result of the comments received and to add clarifying information to the document. These modifications are not substantial, and the RI/FS report is now considered a final document.

Ecology will use the information in the RI/FS report to select a cleanup action for the Site, and develop a cleanup action plan. The plan will be part of a legal agreement called a consent decree between Ecology and the Port, and possibly others. The consent decree is expected to be issued for public review in mid-2015.

After the consent decree is reviewed by the public and filed in Whatcom County Superior Court, detailed design documents will be developed and necessary permits obtained. Construction is expected to begin in late 2016 or early 2017.

### **4. Comments and Ecology Responses**

#### Comments submitted by Monte Hokanson

The I & J Waterway clean-up plan is commendable with a few exceptions.

What is the clean-up plan for soil contamination in stagnant water? Areas like the channel which are not naturally covered by river sedimentation.

Does the clean-up plan support or exclude installing a continuous waterfront path from the Marina to the Cornwall site?

Are any waterfront sites not associated with the Marina expansion plan scheduled for clean-up by 2017?

*Ecology Response: The investigation of the site shows that most areas are receiving clean river sediment. Areas where this is not happening quickly enough or where buried contaminated sediment could be disturbed are slated for active cleanup measures such as capping or removal under the preferred cleanup action for the site.*

*Regarding land use plans, the project is compatible with the uses anticipated under recent Port and City planning documents.*

*In regards to other waterfront cleanup sites, there are several that are expected to be under construction by 2017: Whatcom Waterway Phase 1, Central Waterfront, Cornwall Avenue Landfill, RG Haley, GP West, Harris Avenue Shipyard, and Weldcraft Steel and Marine.*

*Please go to:*

*[http://www.ecy.wa.gov/programs/tcp/sites\\_brochure/blhm\\_bay/sites/bel\\_bay\\_sites.html](http://www.ecy.wa.gov/programs/tcp/sites_brochure/blhm_bay/sites/bel_bay_sites.html) for more information about these sites.*

Comments submitted by Darrel Weiss

Hello Lucy - Simply stated, the I & J Waterway should be cleaned up so that future risk of mercury exposure is as close to eliminated as is reasonably possible. If the risk of mercury exposure in the future cannot be eliminated, other development in the area should be curtailed.

Please bear in mind the very high probability that there will be marina development and a dramatic increase in the level of boating activity in the immediate vicinity.

Please consider the risk to future generations. Short term fixes are not a good use of (monetary and other) resources. It is unlikely that another effort to remove mercury will be made in the future. Cost should not be the deciding factor when it comes to mercury exposure. Figure out how to pay for completely-adequate removal before proceeding. Or wait to proceed until such time as the job can be done in a way that reduces risk of mercury exposure to a reasonably-complete level. Personally, I believe the only way to do that is to remove the mercury rather than to bury it.

*Ecology Response: Ecology's mandate under the state cleanup law, the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, is to prevent exposure to harmful levels of contamination under current and future exposure scenarios. Chapter 6 of the remedial investigation and feasibility study report (RI/FS) presents information about contaminant fate and transport processes including factors that could affect sediment stability now and in the future. If exposure scenarios change in the future, the cleanup will be revisited and additional cleanup measure may be required.*

*Regarding mercury, it is co-located with the I & J Waterway site contaminants and is associated with the Whatcom Waterway cleanup site (for more information go to: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=219>). The preferred cleanup alternative for the I & J Waterway site will address the co-located mercury contamination, achieving natural background levels.*

*Pertaining to short term fixes, reasonableness and costs, in accordance with the MTCA a range of six cleanup alternatives were evaluated in Chapter 12 of the RI/FS. All of the alternatives prevent exposure to harmful levels of contamination under current and future exposure scenarios.*

*The evaluation considered a number of environmental benefit criteria and cost, in comparison to the full removal cleanup option. The evaluation showed Alternative 4 as the option that is "permanent to the maximum extent practicable" and therefore the preferred cleanup option for the site.*

Comments submitted by Dale Peterson

I agree with the proposal to remove material from the waterway. I suggest disposal to Eastern Oregon or Wyoming using empty returning train coal cars.

*Ecology Response: Transport and disposal of the dredged material will likely be left to the construction contractor to decide, based upon meeting strict performance criteria. These criteria will be defined in future engineering design and construction documents for the cleanup of the I & J Waterway site.*

Comments submitted by Louann Chapman

Regarding the I & J Waterway plans: I think most crucial is that we need to be certain that we have good controls on our storm water to ensure that dioxin and other contaminants don't continue entering the water! Few citizens will spend the time reading all 275 pages of the project, I being one of them. It's a very tragic situation that the city has inherited this poisonous mess through ignorance of what the true cost of cleanup was going to be. Georgia Pacific pulled the wool over everyone's eyes (as all dirty industries do when they pack up and leave town), but a few of us saw the "sale" that did not hold GP accountable for its toxic poisoning as one of the stupidest mistakes ever. Now taxpayers will be paying so much more for those bad decisions. GP weren't the only ones spoiling our pristine shores. I was living here and contributed to the dumping of all refuse for years at the dump site. I don't feel good about that.

*Ecology Response: Ecology agrees with the importance of understanding the relationship between stormwater and the I & J Waterway contaminated sediment site. Section 6.1.2 of the RI/FS discusses stormwater.*

*Updated stormwater permits and associated maintenance and cleanup schedules are likely to prevent recontamination of remediated sediment. This will be verified through post-cleanup sediment monitoring. Ecology's Toxics Cleanup Program and Water Quality Program will closely coordinate with each other and the Port and City to address potential recontamination issues.*

*In regard to the Port purchase of contaminated property from GP, Ecology understands that the Port did not reach this decision lightly and that their cleanup costs are covered by insurance and grant funding from Ecology.*

Comments submitted by Gaythia Weiss

The I & J waterway presents today as a complex overlay of contamination issues from previous industrial and seaport uses of the site. These issues took a long time to accumulate and their remediation is not simple. Thus, in my opinion, solutions need to be undertaken with the expectation that the selected methods will result in results that will offer long term cleanup and protection given the anticipated uses of this location.

It is known that there are a number of current and anticipated uses and conditions.

- I. This is a Federal waterway with a current authorized channel depth of 18 feet below mean lower low water (MLLW).

*Ecology Response: This is correct, and Ecology understands that the Port does not intend to use the authorized dimensions in the areas of the site designated for monitoring of naturally forming caps. As a result the Port will coordinate with the federal government to work towards reauthorizing the dimensions of the waterway to exclude the areas of the site designated for naturally forming caps.*

- II. It is anticipated that the shoreline at the end of the channel will become a public park and beach.

*Ecology Response: This is correct, and all cleanup alternatives considered in the RI/FS eliminate potential exposure to harmful levels of contamination given this planned use.*

- III. The land along the sides of the channel are in use as a Coast Guard Station, and for industry, including a seafood plant. These facilities require docks.

*Ecology Response: This is correct, and all cleanup alternatives considered in the RI/FS eliminate potential exposure to harmful levels of contamination given these uses.*

- IV. It can reasonably be anticipated that climate change will impact this site, bringing sea level rise, severe storms, and ocean acidification.

*Ecology Response: Increasing ocean acidification is unlikely to have any significant affect on site contaminants and the cleanup of those contaminants.*

*Long term Puget Sound-wide sediment monitoring performed by Ecology's Environmental Assessment Program, are a more appropriate venue through which to assess the potential effects of ocean acidification.*

*Regarding sea level rise, tsunamis, and wind and waves, please see sections 3.1.4 and 6.3.2 of the RI/FS. The future design of the cleanup action will evaluate these sediment stability concerns in more detail.*

- V. The site may be impacted in the future by geological events including earthquakes, soil liquefaction and earthquake generated tsunamis.

*Ecology Response: Please see previous response regarding tsunamis. Regarding seismic influences on sediment stability please see section 6.3.4 of the RI/FS. The future design of the cleanup action will evaluate these sediment stability concerns in more detail.*

- VI. Other proposed projects may have impacts on plans for the I & J Waterway. The tentatively scheduled Lower Nooksack Estuary Restoration Project, which is part of the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), is under consideration

by the US Corps of Engineers. This may affect river flow and sediment loads into Bellingham Bay and thus affect plans here for Monitored Natural Recovery (MNR).

*Ecology Response: Ecology is aware of this project. It is not yet funded and there is no timeline for implementation.*

*If and when it is implemented, any effects on the site would be shown through sediment monitoring. It is anticipated that post-construction surface sediment quality will be monitored throughout the site at Years 1, 3, 5, 10, 20 and 30. If sediment quality does not meet site cleanup standards, additional cleanup measures may be required.*

I favor a modified version of Alternative 6. This is the only version that requires a full excavation of sediments down to the original clay layer.

*Ecology Response: The preference for Alternative #6 is noted, but under MTCA Ecology can only require implementation of the alternative that is “permanent to the maximum extent practicable”. See WAC 173-340-360(3).*

*All six of the alternatives in the I & J Waterway RI/FS eliminate exposure to harmful levels of contamination and protect human health and the environment. The alternatives incorporate different cleanup methods, resulting in different levels of permanence.*

*To identify the alternative that is “permanent to the maximum extent practicable” a disproportionate cost analysis was performed to identify the option whose incremental cost over a lower cost option is proportionate to the increase in environmental benefit. See WAC 173-340-360(3)(e). Chapter 12 of the RI/FS presents this evaluation and identifies Alternative #4 as being “permanent to the maximum extent practicable”.*

In my opinion, Alternative 4, the preferred alternative in this document, is deficient in several ways.

#### A. Permanence and Disproportionate Cost Analysis

It is stated on p. 137 that (my bold & caps):

“MNR in the Navigation Channel and Coast Guard Units would not restrict **CURRENT** waterway usage and the **CURRENT** water depth in those areas is adequate for **CURRENT** navigation needs.”

But the method to be used to achieve MNR is largely dependent on coverage of contaminated sediments by fresh uncontaminated sediment. Thus it seems unreasonable to both believe that MNR can occur and to simultaneously think that **CURRENT** conditions will hold over time.

Therefore it is not a matter of “in the event that maintenance dredging becomes necessary”. In fact, this necessity seems inevitable, unless the Federal Waterway is to be allowed to fill and then to be abandoned.

If, in fact the future abandonment of the Federal Waterway is a hidden assumption of this alternative, that abandonment needs to be part of the economic analysis for this alternative. If it is not to be abandoned, the economic consequences of having to come back, dredge this area, and remediate, needs to be factored into the cost of alternative 4.

Permanence and Disproportionate Cost Analysis is also affected by the items listed above in items I – VI. These should be taken into account.

It is noted in section 12.2.5 that:

*“Capping the head of the Waterway will require performance monitoring and potential contingency actions for all alternatives except Alternative 6.”*

This is precisely the area planned for public access.

*Ecology Response: Natural capping is occurring under current uses. Alternative 4 incorporates this into the cleanup action and calls for monitoring to ensure that the natural caps continue to form and are not disturbed.*

*In terms of the federal waterway, Ecology understands that the Port does not intend to use the authorized dimensions in the areas of the site designated for monitoring of naturally forming caps. As a result, the Port will coordinate with the federal government to work towards reauthorizing the dimensions of the waterway to exclude the areas of the site designated for naturally forming caps.*

*These land/navigational use decisions are the Port’s and are outside Ecology’s cleanup authority. Please contact Mike Stoner, Environmental Director for the Port at: <mailto:mikes@portofbellingham.com> for further information. Ecology’s mandate is to ensure protection of human health and the environment, given the Port’s land use decisions.*

*Regarding the quote from section 12.2.5 of the RI/FS, the cap will be designed to protect human health given the planned use. Monitoring will ensure that the integrity of the cap is maintained over time. If monitoring shows that the cap is not functioning as intended, additional cleanup measures may be required.*

*Pertaining to consideration of items I-VI, please see our response to those items. These were considered as part of developing the remedial alternatives presented and evaluated in the RI/FS.*

## B. Stormwater

There are City Stormwater outlets emptying into the I & J waterway in the vicinity of the proposed public park and beach area. It is known, from research done by Nat Scholz, and other researchers at the Northwest Fisheries Science Center, NOAA Fisheries, Seattle, Washington that contaminants in urban stormwater has deleterious effect on salmon. See for example: <http://www.ncbi.nlm.nih.gov/pubmed/22194802>.



Even the preferred option, alternative 4, considerable dredging of the waterway must be performed, as well as (in that case) capping near shore. Prior to these remediation actions would be an ideal time to relocate the stormwater outlets out of the confines of the I & J water to deeper water, This would provide for better mixing and dispersion of the stormwater and its contaminants in the Bay beyond the waterway. This would help this project achieve source control.

*Ecology Response: The cited research pertains to fresh water urban streams and is not relevant to an open near-shore marine situation.*

*More importantly, the regulatory approach to stormwater as a potential on-going source of contamination is not to dilute it in the receiving water, but to control contaminant inputs within the storm drain system.*

*Note that sediments at stormwater outfalls within the site will be monitored following construction of the cleanup. In addition, Ecology's Toxics Cleanup and Water Quality Programs, the Port of Bellingham and the City of Bellingham will be working together during the coming months on the issue of stormwater as a potential ongoing source of contamination.*

### C. Angle of Repose and the Problems with Partial Dredging

The diagram given in the fact sheet, publication 14-09-321, shows a direct interface between areas to be dredged, areas for monitoring of naturally formed cap after a 6" layer of sand is placed on top and areas where only monitoring of a naturally formed cap is to occur. Additionally, section 6.3.2 notes that: "Remedial design activities for the final cleanup action will also include additional evaluations of the impacts of wave disturbances on sediment stability."

It is, in my opinion, unreasonable to anticipate that the sediments in the MNR areas will stay in position, once dredging occurs nearby. Under wave, current and tidal action they will re-equilibrate. This movement will likely undo some of the efforts at capping and monitored natural recovery by new sedimentation. Contaminants can be expected to be exposed and dispersed.

*Ecology Response: Coastal engineering evaluations will be conducted as part of future remedial design activities to ensure that cap thicknesses and composition are designed to stay in-place and that the MNR area will effectively contain contaminated sediment. Adjustments will be made to the cleanup action as necessary based on the remedial design work.*

*Also, the design work will define appropriate slopes and materials for the transitions between the various areas of the site.*

*All cleanup areas will be monitored post-construction to ensure compliance with cleanup standards, including the anticipated formation of natural caps. If cleanup standards are not being met, additional cleanup measures may be required.*

Conclusion:

It is my opinion that a robust analysis of factors related to permanence will demonstrate that a more complete remediation effort for the I & J Waterway is actually the best, and also ultimately the most cost effective, option.

I agree with this Feasibility Study that upland disposal of sediments into an appropriately designated, designed and maintained landfill should be the only option used for contaminated sediment obtained from dredging this site.

*Ecology Response: Please see responses to your previous comments.*

Comments submitted by Terry Montonye

PAHs causing cardiac edema in herring and tumors in the livers of bottom fish (the reason crabbing's been so good) plus the sedimentized PCBs from the 1970s that continue to decimate all the way up to killer whales lead me to advocate "dredge, dredge, dredge" well into the Bay at I&J Waterway and Whatcom Creek. Rather than a little, do a lot; be complete, in other words, in the process showing all of Puget Sound how to dredge, transfer to BNSF hopper cars and ship to the Roosevelt Toxic Landfill efficiently and thoroughly!

And, while those two waterways are being dredged, Ms. First and the folks at RE Sources can continue analyzing storm sewers, watershed flows and cost effective pollutant remediation methods -- e.g., more street cleaning and more cops for fining polluters -- looking, ultimately, to spot re-vitalized biodiversity in both waterways. Simultaneously, NOAA's new ocean acidification monitors should be able to decide if we can "toe dig" on a new shellfish farm on Cornwall Beach, to boot. But, more importantly, starfish killers from our secondary sewage plant there in Fairhaven need to get IDd and filtered out in time to keep muscles from moving in and dominating both new waterway ecosystems, thereby countering, at least somewhat, all the Bay-wide benefits from the reductions in PAHs and PCBs due to all the dredging.

*Ecology Response: The preference for Alternative #6 is noted, but under MTCA Ecology can only require implementation of the alternative that is "permanent to the maximum extent practicable". See WAC 173-340-360(3).*

*All six of the alternatives in the I & J Waterway RI/FS eliminate exposure to harmful levels of contamination and protect human health and the environment. The alternatives incorporate different cleanup methods, resulting in different levels of permanence.*

*To identify the alternative that is "permanent to the maximum extent practicable" a disproportionate cost analysis was performed to identify the option whose incremental cost over a lower cost option is proportionate to the increase in environmental benefit. See WAC 173-340-360(3)(e). Chapter 12 of the RI/FS presents this evaluation and identifies Alternative #4 as being "permanent to the maximum extent practicable".*

*The Whatcom Waterway site went through the same process. The remediation of these sites, as well as four other waterfront sites will reduce contaminant concentrations in Bellingham Bay. Please go to:*

*[http://www.ecy.wa.gov/programs/tcp/sites\\_brochure/blhm\\_bay/sites/bel\\_bay\\_sites.html](http://www.ecy.wa.gov/programs/tcp/sites_brochure/blhm_bay/sites/bel_bay_sites.html) for further information about the multiple cleanup sites being addressed in Bellingham Bay.*

#### Comments submitted by Judith Akins

Thank you for allowing us the opportunity to comment on the Remedial Investigation/Feasibility Study for the I & J Waterway.

I am a resident of Bellingham and paddle and swim in these waters as well as eat the seafood which are caught nearby. I am interested in restoring the bay to a cleaner ecology and an environment which marine, terrestrial, and humans can flourish and enjoy.

I do believe the preferred cleanup alternative for this site, as I read your document, is clearly #6.

This alternative removes all existing contaminants and protects human health. With full clean up it allows the waterway to be used in future years whether planned for now or not. No one will have to go back and remediate again this polluted site.

I do believe careful consideration has to be taken as to consumption rates of fish. Washington State has the rates that are not properly analyzing the amount of fish people eat especially our native populations. They also overestimate the size of individual, what about children and women!

Please consider using the 175g/day compromise rate along with body weight of 79kg.

We cannot wipe away all the damage that our predecessors have "dumped" on this waterway, maybe perhaps through some ignorance. But, we are ignorant no more and we need to do our best to leave the cleanest environment for our future generations.

*Ecology Response: The preference for Alternative #6 is noted, but under MTCA Ecology can only require implementation of the alternative that is "permanent to the maximum extent practicable". See WAC 173-340-360(3).*

*All six of the alternatives in the I & J Waterway RI/FS eliminate exposure to harmful levels of contamination and protect human health and the environment. The alternatives incorporate different cleanup methods, resulting in different levels of permanence.*

*To identify the alternative that is "permanent to the maximum extent practicable" a disproportionate cost analysis was performed to identify the option whose incremental cost over a lower cost option is proportionate to the increase in environmental benefit. See WAC 173-340-360(3)(e). Chapter 12 of the RI/FS presents this evaluation and identifies Alternative #4 as being "permanent to the maximum extent practicable."*

*With regard to the consumption rate and body weight suggested, these are draft default values under consideration as part of an on-going Ecology led rule making effort to update the Surface Water Quality Standards Chapter 173-201A WAC (WQS). Establishing site specific fish consumption rates to develop site specific sediment cleanup levels under the state Sediment Management Standards Chapter 173-204 WAC (SMS) is a different process from establishing a default fish consumption rate for the WQS rule making. For the I & J Waterway site, fish consumption rates and body weight were derived from the Tulalip Tribe Seafood Consumption Study (Toy et al. 1996).*

*Moreover, under the SMS, sediment cleanup levels are established based on the higher of: background concentration, risk-based concentration, or the practical quantitation limit (the lowest concentration that can be reliably measured). Based on this, the preliminary sediment cleanup level for cPAHs identified in the RI/FS is a regional background concentration not a risk-based concentration. As such, a different seafood consumption rate or body weight would not affect the preliminary sediment cleanup level.*

Comments submitted by Pam Borso

Thank you for the opportunity to comment on the cleanup of the I & J Waterway in Bellingham.

I would support Alternative #6 as I feel it would best serve the habitat and the public and take care of any long term plans that might be considered.

Although it may be more expensive than the other alternatives, it would provide a full dredge.

A full dredge would not be dependent on the Nooksack River to deposit sediments to partially seal the contaminated water and it would not preclude this resource from being a navigable channel should that be needed here in the future.

A full dredge would also remove and isolate the toxins found there. I believe we should do a thorough clean up of the sight for the good of everyone.

Thank you again for your attention to this important matter.

*Ecology Response: The preference for Alternative #6 is noted, but under MTCA Ecology can only require implementation of the alternative that is “permanent to the maximum extent practicable”. See WAC 173-340-360(3).*

*All six of the alternatives in the I & J Waterway RI/FS eliminate exposure to harmful levels of contamination and protect human health and the environment. The alternatives incorporate different cleanup methods, resulting in different levels of permanence.*

*To identify the alternative that is “permanent to the maximum extent practicable” a disproportionate cost analysis was performed to identify the option whose incremental cost over a lower cost option is proportionate to the increase in environmental benefit. See WAC 173-340-360(3)(e). Chapter 12 of the RI/FS presents this evaluation and identifies Alternative #4 as being “permanent to the maximum extent practicable.”*

*In terms of the federal waterway, Ecology understands that the Port does not intend to use the authorized dimensions in the areas of the site designated for monitoring of naturally forming caps. Therefore, the Port will coordinate with the federal government to work towards reauthorizing the dimensions of the waterway to exclude the areas of the site designated for naturally forming caps.*

*These land/navigational use decisions are the Port's and are outside Ecology's cleanup authority. Please contact Mike Stoner, Environmental Director for the Port at: <mailto:mikes@portofbellingham.com> for further information. Ecology's mandate is to ensure protection of human health and the environment, given the Port's land use decisions.*

#### Comments submitted by George Dyson

I have perused the recent Draft Remedial Investigation and Feasibility Study Report for the I & J waterway site. As always, I am happy to see any movement forward on restoring the Bellingham waterfront, and, even more pleased to see the question of maintaining navigable depths addressed in this particular study--even if the preferred alternative is not one I would personally agree with.

My only comment of record in this matter is so broad that it will probably be dismissed as outside the scope of the current study, but I am voicing it nonetheless. It seems to me that it is shortsighted, technically crippling, and unnecessarily expensive to be addressing these three adjacent Bellingham Bay cleanup projects -- I & J Waterway / Aerated Stabilization Basin / Whatcom Waterway -- separately rather than taking a comprehensive look at how they relate to each other, and how they might be tackled together, as a whole. The present approach is equivalent to entering into separate contracts, with separate contractors, separate equipment, and separate paint sources, in order to paint the front, side, and back of a house, rather than simply painting the entire house.

Instead of a substandard, incomplete cleanup of both Federal waterways, and, at present, no coherent plan for the ASB, we should at least attempt to come up with a comprehensive plan that addresses all three -- and achieves a much higher standard of cleanup while saving the taxpayers, long term.

*Ecology Response: Ecology agrees that a comprehensive approach is the most efficient and we are coordinating the cleanups. In fact all the RI/FS reports for waterfront sites contain a section discussing coordination with and relationship to other sites. Section 2.3 of the I & J Waterway RI/FS includes this information.*

*The biggest confounding factor to a comprehensive construction approach is timing. We are working to address contamination in the environment as quickly as possible. Some sites are taking longer than anticipated and some are moving faster.*

*Regarding coordinating the ASB, Whatcom Waterway and I & J Waterway construction, the ASB is part of the Whatcom Waterway cleanup site and will be addressed, along with the outer waterway, during the second phase of construction. Construction is anticipated to begin in 2018. The first phase of the Whatcom Waterway cleanup addresses the inner*

*waterway, the shipping terminal and the Log Pond. Construction is expected to begin in July/August 2015 following a long delay in the federal permitting process. The I & J Waterway site is expected to go to construction in late 2016 or early 2017. I & J construction could occur in conjunction with other projects slated for construction in the 2016/2017 timeframe.*

*Pertaining to the statement that the cleanups are substandard and incomplete, all remedial alternatives evaluated in the I & J Waterway RI/FS, and in RI/FSs for all the Bellingham sites, eliminate exposure to harmful levels of contamination and protect human health and the environment. The alternatives incorporate different cleanup methods, resulting in different levels of permanence. Under MTCA Ecology can only require implementation of the alternative that is “permanent to the maximum extent practicable”. See WAC 173-340-360(3).*

*To identify the alternative that is “permanent to the maximum extent practicable” a disproportionate cost analysis is performed to identify the option whose incremental cost over a lower cost option is proportionate to the increase in environmental benefit. See WAC 173-340-360(3)(e). Chapter 12 of the I & J Waterway RI/FS presents this evaluation and identifies Alternative #4 as being “permanent to the maximum extent practicable”.*

#### Comments submitted by Re Sources

In reviewing the information contained in the RI/FS, we are choosing to advocate for Alternative #6, a full dredge. While Alternative #4 seems practical, we believe that the benefits of Alternative #6 outweigh these. Our comments supporting Alternative #6 and other concerns are presented below.

- The Disproportionate Cost Analysis states that the #4 is the most cost effective. In terms of cost and benefit, Alternative #6 can arguably be counted as more cost-effective. Alternative #6 removes all of the existing contamination and thus should be rated as more protective than any of the other alternatives, in protection of human health via seafood consumption and direct contact and for protection of the benthic community. Changing this ranking to accurately reflect protectiveness will alter the ranking of Alternative #6, to one which is more cost-effective.

*Ecology Response: Alternative #6 was given the highest ranking of 5 for the protectiveness criterion in the disproportionate cost analysis (DCA). The protectiveness criterion is also the most heavily weighted at 30%.*

*All six of the alternatives in the I & J Waterway RI/FS eliminate exposure to harmful levels of contamination and protect human health and the environment. The alternatives incorporate different cleanup methods, resulting in different levels of permanence.*

*Under MTCA Ecology can only require implementation of the alternative that is “permanent to the maximum extent practicable”. See WAC 173-340-360(3). The DCA identifies the alternative that is “permanent to the maximum extent practicable”. Chapter 12 of the I & J*

*Waterway RI/FS presents the DCA and identifies Alternative #4 as being “permanent to the maximum extent practicable”.*

- Leaving sediment in the landward half of the Waterway will preclude its use for navigation. While there may not be plans for deep draft vessels in the short-term, future options may be circumvented by today’s actions. It seems that a public resource such as this should be maintained. Alternative #4 will close off options of deep draft navigation to the Waterway, except where Bornstein Seafoods is now located. Alternative #6 is the only option that ensures that navigation is preserved throughout most of the I & J Waterway (excluding the head of the Waterway).

*Ecology Response: You are correct, the preferred remedial alternative will preclude the currently authorized use of the federal channel north east of the area designated for dredging.*

*Ecology understands that the Port does not intend to use the authorized dimensions of the federal channel in this area. As a result, the Port will coordinate with the federal government to work towards reauthorizing the dimensions of the waterway to exclude the areas of the site designated for naturally forming caps.*

- Two of the remedies chosen in Alternative #4, Monitored and Enhanced Natural Recovery, rely on the deposition of Nooksack River sediment to bury contaminants. The reconnection of the Nooksack River to Lummi Bay is now seriously being considered. If this project goes ahead, it should provide great habitat benefit to the Nooksack Delta and recreate habitat that has been lost for decades. It will also change the sedimentation pattern and amount that reaches Bellingham Bay. Natural recovery may no longer be a viable option. Because Alternative #6 is protective and does not rely on natural recovery, we believe it is the better option.

From October 2014 Puget Sound Nearshore Ecosystem Restoration Project: publication: [http://www.pugetsoundnearshore.org/selected\\_plans.html](http://www.pugetsoundnearshore.org/selected_plans.html)

“The Nooksack River Delta is located on the Lummi Nation lands north of Bellingham, Wash. It includes nearly all of the Nooksack and Lummi River estuaries below Ferndale, Wash. The Nooksack and Lummi River flow paths have been modified since the mid-19th century, beginning with active removal of large wood, draining, diking and levee construction. Today, substantial surface water diversions, groundwater withdrawals and drainage activities within the Nooksack River watershed impact the magnitude, timing and duration of delta surface water flows. The proposed restoration modifies levees, roads and other hydrological barriers, restoring delta riverine and tidal flow, as well as sediment transport and delivery processes. All told, it restores 1,807 acres of scarce tidal freshwater wetlands.”

*Ecology Response: Ecology is aware of this project. It is not yet funded and there is no timeline for implementation.*

*If and when it is implemented, any effects on the site would be shown through sediment monitoring. It is anticipated that post-construction surface sediment quality will be*

*monitored throughout the site at Years 1, 3, 5, 10, 20 and 30. If sediment quality does not meet site cleanup standards, additional cleanup measures may be required.*

- Dioxin is present at high levels in the Waterway and in Bellingham Bay, although it is considered a widespread contaminant and not a “site contaminant.” It is stated in the RI/FS that dioxin will be remediated because it is co-located with other contaminants. Please address whether the remedy selected for each unit is sufficient to remediate the dioxin. For example, if monitored natural recovery is sufficient to address nickel and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) in the Coast Guard Unit, please address whether that same remedy is also sufficient to address the dioxin in that unit? Please address for each unit. Also, there were nine samples for dioxin within the I & J Waterway, is this a sufficient number of samples to detect hot spots?

*Ecology Response: We have modified Table 12-1 of the RI/FS to show the affect of the site cleanup on dioxin and furan concentrations.*

*As indicated in section 8.2.2 of the RI/FS, the site remediation will reduce concentrations of co-located contaminants to meet regulatory goals. Those goals are indicated in Table 4-1 of the RI/FS. For dioxin and furans, the goals are 5 and 16 ng TEQ/kg dry weight, based on PQL and preliminary regional background concentrations respectively. Ecology will likely require compliance with regional background since the site will equilibrate to this value.*

*In terms of the sufficiency of the number of dioxin and furan samples, the samples were located in areas that had the potential to be hot spots based upon past industrial activities and on-going discharges, as well as areas further out into the waterway. The sampling was appropriate for understanding the levels of dioxins and furans co-located with site contaminants.*

- Dioxin outside of the prescribed I & J Waterway site is present at high levels. For example, one sample near the Bornstein stormwater outfall was 33 TEQ, approximately twice the proposed regional background level. How will high dioxin levels here and throughout the Bay be addressed? This spot certainly seems as if it could have been considered part of the I & J Waterway site, since it appears associated with site activity.

*Ecology Response: Dioxin and furan congener profiles were evaluated in Appendix E of the RI/FS report. This work concludes that the dioxins and furans within the site appear to be associated with diffuse sources like stormwater, and not any site-associated release/activity. As a result, dioxins and furans do not define the boundaries of this site.*

*Concentrations of dioxins and furans outside of the site boundaries will be reduced in the long term thorough a combination of site cleanup efforts, source control/pollution prevention programs and toxics reduction strategy efforts.*

*Keep in mind that the main exposure concern for subtidal bioaccumulative chemicals in sediment is bioaccumulation through crabs and bottomfish to humans and other higher order organisms. Crabs and bottomfish have a 10-square kilometer unconstrained home range (PSDDA, 1988). This means that a single station of elevated dioxins and furans is not*



*necessarily harmful. Rather, it is the spatially-weighted average concentration over the home range that must be considered.*

- This site has five stormwater outfalls. While all five of these sites are under permit, it is acknowledged that some of the site contaminants and dioxin are common contaminants in stormwater and that stormwater is contributing to the contamination here. We suggest that the Ecology Toxics Cleanup program, the Ecology Stormwater permits section, City of Bellingham, and Port of Bellingham work together to monitor stormwater contaminants, employ Best Management Practices, and operate an adaptive management feedback loop to control these sources in a timely manner.

*Ecology Response: Ecology's TCP and WQ programs will be working with the Port and City during the coming months on the issue of stormwater as a potential ongoing source of contamination.*

- The assumptions used in the human health equations are not as protective as they should be. Currently the Department of Ecology is proposing to use a fish consumption rate of 175 g/day to calculate water quality standards. It has been acknowledged that this rate is even too low for some tribal and subsistence members, but it is a standard that has been widely accepted. In the absence of site-specific fish consumption data, we believe the 175 g/day value should be used, instead of values from the 1996 Toy study of Tulalip tribal members. Additionally, we object to use of the body weight of 81.8 kg (180 pounds). This weight exceeds the previous standard weight of 70 kg, and does not appropriately consider the weight of children and many women and Pacific Islanders. We request that you use the 175 g/day and 70 kg to calculate the risk-based concentration.

*Ecology Response: The consumption rate and body weight indicated are draft default values under consideration as part of an on-going Ecology led rule making effort to update the Surface Water Quality Standards Chapter 173-201A WAC (WQS). Establishing site specific fish consumption rates to develop site specific sediment cleanup levels under the state Sediment Management Standards Chapter 173-204 WAC (SMS) is a different process from establishing a default fish consumption rate for the WQS rule making. For the I & J Waterway site, fish consumption rates and body weight were derived from a site-specific study, the Tulalip Tribe Seafood Consumption Study (Toy et al. 1996).*

*With regard to body weight, since the Tulalip survey is being utilized for consumption information it is appropriate to also use the body weight from that study rather than a default value.*

*Moreover, under the SMS, sediment cleanup levels are established based on the higher of: background concentration, risk-based concentration, or the practical quantitation limit (the lowest concentration that can be reliably measured). Based on this, the preliminary sediment cleanup level for cPAHs identified in the RI/FS is a regional background concentration not a risk-based concentration. As such, a different seafood consumption rate or body weight would not affect the preliminary sediment cleanup level.*

- The use of regional background levels for cPAHs sets a bad precedent and does a disservice to peoples who eat fish and shellfish from area waters. We ask that you use the risk based concentration (as elucidated above) to set the sediment cleanup objective and cleanup screening level, and that you set the cleanup level as close to the sediment cleanup objective as possible in order to protect people from the effects of cPAHs. .

*Ecology Response: The ultimate goal under the SMS is to achieve the sediment cleanup objective (SCO) for cPAHs. Due to on-going contaminant inputs to the site from diffuse sources, the SCO cannot yet be met. The multiple cleanups that will occur throughout the bay over the next several years, on-going natural recovery processes, source control/pollution prevention programs, and toxics reduction strategy efforts are expected to achieve the SCO over time.*

*Also see responses to your previous two bullets.*

## **APPENDIX A – Original Comment Letters**

**From:** Monte Hokanson [monte.hokanson@hotmail.com]  
**Sent:** Wednesday, November 05, 2014 9:02 PM  
**To:** Kenner, Krista (ECY)  
**Subject:** RE: Dept. of Ecology public comment period - I & J Waterway site in Bellingham

Krista,

The I & J Waterway clean-up plan is commendable with a few exceptions.

What is the clean-up plan for soil contamination in stagnant water? Areas like the channel which are not naturally covered by river sedimentation.

Does the clean-up plan support or exclude installing a continuous waterfront path from the Marina to the Cornwall site?

Are any waterfront sites not associated with the Marina expansion plan scheduled for clean-up by 2017?

Sincerely,  
Monte

**From:** Darrel Weiss [<mailto:djweiss9@comcast.net>]

**Sent:** Tuesday, November 04, 2014 5:10 AM

**To:** McInerney, Lucy (ECY)

**Subject:** The I & J Waterway

Hello Lucy - Simply stated, the I & J Waterway should be cleaned up so that future risk of mercury exposure is as close to eliminated as is reasonably possible. If the risk of mercury exposure in the future cannot be eliminated, other development in the area should be curtailed.

Please bear in mind the very high probability that there will be marina development and a dramatic increase in the level of boating activity in the immediate vicinity.

Please consider the risk to future generations. Short term fixes are not a good use of (monetary and other) resources. It is unlikely that another effort to remove mercury will be made in the future. Cost should not be the deciding factor when it comes to mercury exposure. Figure out how to pay for completely-adequate removal before proceeding. Or wait to proceed until such time as the job can be done in a way that reduces risk of mercury exposure to a reasonably-complete level. Personally, I believe the only way to do that is to remove the mercury rather than to bury it.

Thank you for your consideration.

Darrel Weiss  
2611 Vining Place  
Bellingham, WA

**From:** [daybydaytoalaska@comcast.net](mailto:daybydaytoalaska@comcast.net) [mailto:[daybydaytoalaska@comcast.net](mailto:daybydaytoalaska@comcast.net)]

**Sent:** Monday, November 03, 2014 9:52 PM

**To:** McInerney, Lucy (ECY)

**Subject:** I & J waterway

I agree with the proposal to remove material from the waterway. I suggest disposal to Eastern Oregon or Wyoming using empty returning train coal cars.

Dale Petersen, Sandy Pt (Ferndale)

Retired civil engineer; resident of Whatcom Co for 32 years and land owner from 1971

-----Original Message-----

From: Louann Chapman [<mailto:loumura@gmail.com>]

Sent: Tuesday, November 25, 2014 6:08 PM

To: McInerney, Lucy (ECY)

Subject: I & J project

Regarding the I & J Waterway plans: I think most crucial is that we need to be certain that we have good controls on our storm water to ensure that dioxin and other contaminants don't continue entering the water! Few citizens will spend the time reading all 275 pages of the project, I being one of them. It's a very tragic situation that the city has inherited this poisonous mess through ignorance of what the true cost of clean up was going to be. Georgia Pacific pulled the wool over everyone's eyes (as all dirty industries do when they pack up and leave town), but a few of us saw the "sale" that did not hold GP accountable for it's toxic poisoning as one of the stupidest mistakes ever. Now taxpayers will be paying so much more for those bad decisions. GP weren't the only ones spoiling our pristine shores. I was living here and contributed to the dumping of all refuse for years at the dump site. I don't feel good about that.

Thank you,  
Louann Chapman  
Bellingham

To:

Lucy McInerney

Site Manager

WA Department of Ecology,

3190 160th Ave. S.E., Bellevue, WA 98008-5452

[lucy.mcinerney@ecy.wa.gov](mailto:lucy.mcinerney@ecy.wa.gov).

Re: Comments on

"DRAFT REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT I&J WATERWAY SITE"

November 25, 2014

The I & J waterway presents today as a complex overlay of contamination issues from previous industrial and seaport uses of the site. These issues took a long time to accumulate and their remediation is not simple. Thus, in my opinion, solutions need to be undertaken with the expectation that the selected methods will result in results that will offer long term cleanup and protection given the anticipated uses of this location.

It is known that there are a number of current and anticipated uses and conditions.

- I. This is a Federal waterway with a current authorized channel depth of 18 feet below mean lower low water (MLLW).
- II. It is anticipated that the shoreline at the end of the channel will become a public park and beach.
- III. The land along the sides of the channel are in use as a Coast Guard Station, and for industry, including a seafood plant. These facilities require docks.
- IV. It can reasonably be anticipated that climate change will impact this site, bringing sea level rise, severe storms, and ocean acidification.
- V. The site may be impacted in the future by geological events including earthquakes, soil liquefaction and earthquake generated tsunamis.
- VI. Other proposed projects may have impacts on plans for the I & J Waterway. The tentatively scheduled Lower Nooksack Estuary Restoration Project, which is part of the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), is under consideration by the US Corps of Engineers. This may affect river flow and sediment loads into Bellingham Bay and thus affect plans here for Monitored Natural Recovery (MNR).



I favor a modified version of Alternative 6. This is the only version that requires a full excavation of sediments down to the original clay layer.

In my opinion, Alternative 4, the preferred alternative in this document, is deficient in several ways.

A. Permanence and Disproportionate Cost Analysis

It is stated on p. 137 that (my bold & caps):

**"MNR in the Navigation Channel and Coast Guard Units would not restrict CURRENT waterway usage and the CURRENT water depth in those areas is adequate for CURRENT navigation needs."**

But the method to be used to achieve MNR is largely dependent on coverage of contaminated sediments by fresh uncontaminated sediment. Thus it seems unreasonable to both believe that MNR can occur and to simultaneously think that **CURRENT** conditions will hold over time. Therefore it is not a matter of "in the event that maintenance dredging becomes necessary". In fact, this necessity seems inevitable, unless the Federal Waterway is to be allowed to fill and then to be abandoned.

If, in fact the future abandonment of the Federal Waterway is a hidden assumption of this alternative, that abandonment needs to be part of the economic analysis for this alternative.

If it is not to be abandoned, the economic consequences of having to come back, dredge this area, and remediate, needs to be factored into the cost of alternative 4.

Permanence and Disproportionate Cost Analysis is also affected by the items listed above in items I – VI. These should be taken into account.

It is noted in section 12.2.5 that:

*"Capping the head of the Waterway will require performance monitoring and potential contingency actions for all alternatives except Alternative 6."*

This is precisely the area planned for public access.

## B. Stormwater

There are City Stormwater outlets emptying into the I & J waterway in the vicinity of the proposed public park and beach area. It is known, from research done by Nat Scholz, and other researchers at the Northwest Fisheries Science Center, NOAA Fisheries, Seattle, Washington that contaminants in urban stormwater has deleterious effect on salmon. See for example: <http://www.ncbi.nlm.nih.gov/pubmed/22194802>.

Even the preferred option, alternative 4, considerable dredging of the waterway must be performed, as well as (in that case) capping near shore. Prior to these remediation actions would be an ideal time to relocate the stormwater outlets out of the confines of the I & J water to deeper water. This would provide for better mixing and dispersion of the stormwater and its contaminants in the Bay beyond the waterway. This would help this project achieve source control.

## C. Angle of Repose and the Problems with Partial Dredging

The diagram given in the fact sheet, publication 14-09-321, shows a direct interface between areas to be dredged, areas for monitoring of naturally formed cap after a 6" layer of sand is placed on top and areas where only monitoring of a naturally formed cap is to occur.

Additionally, section 6.3.2 notes that:

*"Remedial design activities for the final cleanup action will also include additional evaluations of the impacts of wave disturbances on sediment stability."*

It is, in my opinion, unreasonable to anticipate that the sediments in the MNR areas will stay in position, once dredging occurs nearby. Under wave, current and tidal action they will re-equilibrate. This movement will likely undo some of the efforts at capping and monitored natural recovery by new sedimentation. Contaminants can be expected to be exposed and dispersed.

**Conclusion:**

**It is my opinion that a robust analysis of factors related to permanence will demonstrate that a more complete remediation effort for the I & J Waterway is actually the best, and also ultimately the most cost effective, option.**

**I agree with this Feasibility Study that upland disposal of sediments into an appropriately designated, designed and maintained landfill should be the only option used for contaminated sediment obtained from dredging this site.**

**Sincerely,**

**Gaythia Weis  
InfoPteryx LLC  
1713 Edwards Ct.  
Bellingham WA  
Gaythia@gmail.com**

-----Original Message-----

From: Terry Montonye [<mailto:terrymontonye@msn.com>]

Sent: Tuesday, November 25, 2014 10:50 PM

To: McInerney, Lucy (ECY)

Cc: Lee First; [gstoyka@co.whatcom.wa.us](mailto:gstoyka@co.whatcom.wa.us)

Subject: I&J Cleanup

Dear Ms. McInerney,

PAHs causing cardiac edema in herring and tumors in the livers of bottom fish (the reason crabbing's been so good) plus the sedimentized PCBs from the 1970s that continue to decimate all the way up to killer whales lead me to advocate "dredge, dredge, dredge" well into the Bay at I&J Waterway and Whatcom Creek. Rather than a little, do a lot; be complete, in other words, in the process showing all of Puget Sound how to dredge, transfer to BNSF hopper cars and ship to the Roosevelt Toxic Landfill efficiently and thoroughly!

And, while those two waterways are being dredged, Ms. First and the folks at RE Sources can continue analyzing storm sewers, watershed flows and cost effective pollutant remediation methods -- e.g., more street cleaning and more cops for fining polluters -- looking, ultimately, to spot re-vitalized biodiversity in both waterways. Simultaneously, NOAA's new ocean acidification monitors should be able to decide if we can "toe dig" on a new shellfish farm on Cornwall Beach, to boot. But, more importantly, starfish killers from our secondary sewage plant there in Fairhaven need to get IDd and filtered out in time to keep muscles from moving in and dominating both new waterway ecosystems, thereby countering, at least somewhat, all the Bay-wide benefits from the reductions in PAHs and PCBs due to all the dredging.

Sincerely,

Terry Montonye

U.S. Coast Guard Fish Cop (Ret)

WRIA-1 Planning Unit (Fisheries Caucus)

**From:** Judith Akins [<mailto:sunsetjam@gmail.com>]  
**Sent:** Wednesday, November 26, 2014 11:02 PM  
**To:** McInerney, Lucy (ECY)  
**Subject:** I & J Waterway Clean up Bellingham Bay

Dear Ms McInnerney ,

Thank you for allowing us the opportunity to comment on the Remedial Investigation/Feasibility Study for the I & J Waterway.

I am a resident of Bellingham and paddle and swim in these waters as well as eat the seafood which are caught nearby. I am interested in restoring the bay to a cleaner ecology and an environment which marine, terrestrial, and humans can flourish and enjoy.

I do believe the preferred cleanup alternative for this site, as I read your document, is clearly #6.

This alternative removes all existing contaminants and protects human health. With full clean up it allows the waterway to be used in future years whether planned for now or not. No one will have to go back and remediate again this polluted site.

I do believe careful consideration has to be taken as to consumption rates of fish. Washington State has the rates that are not properly analyzing the amount of fish people eat especially our native populations. They also overestimate the size of individual, what about children and women!

Please consider using the 175g/day compromise rate along with body weight of 79kg.

We cannot wipe away all the damage that our predecessors have "dumped" on this waterway, maybe perhaps through some ignorance. But, we are ignorant no more and we need to do our best to leave the cleanest environment for our future generations.

Sincerely,

Judith Akins

**From:** [borsope@aol.com](mailto:borsope@aol.com) [mailto:[borsope@aol.com](mailto:borsope@aol.com)]  
**Sent:** Thursday, November 27, 2014 8:59 PM  
**To:** McInerney, Lucy (ECY)  
**Subject:** Comments on I & J Waterway cleanup

Lucy McInerney – Site Manager  
WA Department of Ecology  
3190 160th Avenue S.E.  
Bellevue, WA 98008-5452  
Via Email: [lucy.mcinerney@ecy.wa.gov](mailto:lucy.mcinerney@ecy.wa.gov)

Thank you for the opportunity to comment on the cleanup of the I & J Waterway in Bellingham.

I would support Alternative #6 as I feel it would best serve the habitat and the public and take care of any long term plans that might be considered.  
Although it may be more expensive than the other alternatives, it would provide a full dredge.

A full dredge would not be dependent on the Nooksack River to deposit sediments to partially seal the contaminated water and it would not preclude this resource from being a navigable channel should that be needed here in the future.

A full dredge would also remove and isolate the toxins found there. I believe we should do a thorough clean up of the sight for the good of everyone.

Thank you again for your attention to this important matter.

Pam Borso

-----Original Message-----

From: George Dyson [<mailto:gdyson@gmail.com>]

Sent: Friday, November 28, 2014 12:42 PM

To: McInerney, Lucy (ECY)

Cc: Wendy Steffensen

Subject: I & J Waterway

Dear Lucy McInerney,

I have perused the recent Draft Remedial Investigation and Feasibility Study Report for the I & J waterway site. As always, I am happy to see any movement forward on restoring the Bellingham waterfront, and, even more pleased to see the question of maintaining navigable depths addressed in this particular study--even if the preferred alternative is not one I would personally agree with.

My only comment of record in this matter is so broad that it will probably be dismissed as outside the scope of the current study, but I am voicing it nonetheless. It seems to me that it is shortsighted, technically crippling, and unnecessarily expensive to be addressing these three adjacent Bellingham Bay cleanup projects -- I & J Waterway / Aerated Stabilization Basin / Whatcom Waterway -- separately rather than taking a comprehensive look at how they relate to each other, and how they might be tackled together, as a whole. The present approach is equivalent to entering into separate contracts, with separate contractors, separate equipment, and separate paint sources, in order to paint the front, side, and back of a house, rather than simply painting the entire house.

Instead of a substandard, incomplete cleanup of both Federal waterways, and, at present, no coherent plan for the ASB, we should at least attempt to come up with a comprehensive plan that addresses all three -- and achieves a much higher standard of cleanup while saving the taxpayers, long term.

with best wishes,

George Dyson