From:	Benjamin Shorr
To:	Robert Gensemer
Cc:	Eric Blischke/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA; Robert Neely; Jay Field; George Graettinger; Ron Gouguet
Subject:	Re: Follow-up to January 24, 2007 Data Meeting
Date:	01/26/2007 09:24 AM

Eric/Chip/Bob-

I'm going through and trying to figure out what is possible to do prior to the data retreat re: sediment and these are my comments:

1. Including subsurface data on all plots is very time intensive.
2. Adding min, max for surface AND subsurface is very time intensive
3. Developing whisker plots is not something that I can currently generate with the software that I'm working in (Excel)
3. Developing upstream data plots for all contaminants is very time intensive
4. Adding PRG's to the existing river mile plots (3 charts per analyte) is very time intensive. It's less work to add the PRG's to distribution charts- but still a lot of work.
5. I am now unclear on which PRG's should be added-
   a. I thought we discussed adding the Bioaccum. Sediment PRG's (ecorisk) to the distribution charts and possibly the river mile summary charts. This is approx. 8 analytes.
   b. Adding the Industrial and/or Residential soil PRG's will be time intensive and create a jumbled data display.
5. If you want to have the distribution and river mile summary charts/maps by early next week I need to prioritize which pieces should be done for which analytes.

Ben

Robert Gensemer wrote:

> I agree. Lets not worry about too much extra support text and notes at this point. It would be great and very helpful to retreat attendees I'm sure, but with work going down to the wire, lets keep it simple, and just burn several copies of the data presentations. we'll just have to lead people by the hand, so to speak, when we get there.
> -Bob
>
> **********
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>
> >>> <Blischke.Eric@epamail.epa.gov> 1/25/2007 5:30:00 PM >>>

All: I understand that the analysis will be going down to the wire. We can certainly burn cds late in the day on the Monday before the retreat and have them available.

Ben: I would like to talk with you about getting some of the sediment distribution plots available early next week so that people can at least begin looking at the sediment data. Let's touch base tomorrow.

Eric

Benjamin Shorr
<Benjamin.Shorr@
noaa.gov>
01/25/2007 04:41
PM

To
Eric Blischke/R10/USEPA/US@EPA
cc
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<rgensemer@parametrix.com>, Burt Shephard/R10/USEPA/US@EPA, Chip Humphrey/R10/USEPA/US@EPA, Carrie Smith <csmith@parametrix.com>, Dana Davoli/R10/USEPA/US@EPA, Jim Koloszar
<jkoloszar@parametrix.com>, Margaret Spence
<mspence@parametrix.com>, Robert.Neely@noaa.gov
Subject
Re: Follow-up to January 24, 2007 Data Meeting

Sounds and looks good- Margaret and I will follow up on overlapping tasks and automating some chart creation tomorrow. If we are going to create CD's with compilations of the analyses, we will need to actually compile the analyses beforehand. In addition to the objective/agenda that is being worked on, we should have some text about the analyses and
decisions made (DL's, comparison numbers, chemical summation etc) as we
discussed yesterday. Much of this information is in the QM study notes and auto-documentation for specific queries.

Ben

Blischke.Eric@epamail.epa.gov wrote:

I'm good with that.

Eric

Robert Gensemer

<rgensemer@param

etrix.com>

To

Eric Blischke/R10/USEPA/US@EPA

01/25/2007 02:50

cc

PM

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Subject

Re: Follow-up to January 24, 2007

Data Meeting

As for tissue exceedance notes below: No matter what we do, of course,
rivermile plots will visually show exceedance magnitude--that is the
strength of that data presentation method. But since Margaret will need
to pick some kind of multiplier in the QM queries or plotting, perhaps
she could routinely use 100x the tissue TRV? That would be consistent
with the 10-6 and 10-4 HH ranges too.
-Bob

****
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<Blischke.Eric@epamail.epa.gov> 1/25/2007 2:30:28 PM >>>

See below in caps.

Robert Gensemer <rgensemer@parametrix.com> 01/25/2007 02:03 PM

To Eric Blischke/R10/USEPA/US@EPA, Dana Davoli/R10/USEPA/US@EPA, Chip Humphrey/R10/USEPA/US@EPA, Burt Shephard/R10/USEPA/US@EPA, Benjamin.Shorr@noaa.gov, Carrie Smith <csmith@parametrix.com>, Jim Koloszar

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cc

Robert.Neely@noaa.gov

Subject

Re: Follow-up to January 24,
2007

Data Meeting

Great summary, Eric, thanks. A few thoughts:
- Site identification: when we note COIs on whatever map we use, we
should note both the chemical, and the receptor for which risk
thresholds are exceeded - AGREED
- Surface water: I agree with these priorities. The basis of these
priorities is important for the WOE scheme, as Jennifer and I have used
it, by the way.
- BSAFs: Agreed with this summary, and I would add: "Look for trend
line, then derive one or more BSAF if appropriate. At least check
against PRE BSAFs compiled in Risk Parameters table (RP). As for USE of
the BSAFs (you were unclear on this), I don't think we agreed to do much
more than use them to estimate dietary EPCs where we did not have
empirical invert data. I suppose we could use them to back-calc tissue
concentrations sort of like a PRG, but I'd prefer to use the DEQ values
as a starting point. As we discussed, we can always play with the DEQ
values with new or site-specific BSAFs if a particular analysis seems to
call for it. AGREED
- Tissue data: I seem to recall that Margaret was only to show sample
location on a GIS figure, and not all the results which were to be
rivermile plots only? FOR SPECIES WHERE WE DO NOT HAVE MUCH DATA,
SHOW
DATA ON GIS FIGURE - COLOR CODED AS APPROPRIATE. FOR

SCULPIN,
CLAMS AND
CRAYFISH, DEVELOP RM PLOTS SO THAT WE CAN SEE THE SPATIAL
DISTRIBUTION
OF TISSUE CONCENTRATIONS AND THE MAGNITUDE OF
CONCENTRATION (E.G.,
PRG
EXCEEDANCE). WE SHOULD ALSO THINK ABOUT HOW WE CAN
BEST SHOW
MAGNITUDE
OF PRG EXCEEDANCE FOR OTHER FISH. FOR EXAMPLE, LOOKING
AT 10-6 AND
10-4
HH RISK OR SOME MULTIPLIER (100X?) OF THE TISSUE TRV. WE
MAY WANT
TO
DISCUSS FURTHER.

As for paper products, I'm just not sure what is practical, but
I'll
think of it some more. Perhaps at least each of the analysts can
bring a
handfull of copies of each of a few critical plots for chems that
really
exceed thresholds? How many attendees? Alternatively, how about
each
analyst burn a half dozen CD-ROMs of the work done to bring and
pass
around for folks to copy down to laptops?

I LIKE THE CD CONCEPT.

-Bob

****
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<Blischke.Eric@epamail.epa.gov> 1/25/2007
10:56:31 AM >>>

Thanks to everyone for what I thought was a productive meeting. I
think
we were able to get through a lot of things. I also appreciate

the
effort Ben, Jim and Margaret have put in to develop the data evaluation
tools and presentations that were on display yesterday. I am summarizing our action items from yesterday. Please provide any corrections or additions based on your own notes and recollections.

Risk to Benthic Community (Ben):

Ben has done a good job developing the cumulative distribution and river
mile plots. As I indicated in my earlier email, I would like to see
these include subsurface sediment data in addition to surface sediment
data. We also discussed adding maximum values for each of the 1/10 mile
sections. If if does not get too messy, I would also like to see minimum concentrations as well (I think we discussed whisker plots briefly). If there is some way to present minimum, average and maximum
for surface and subsurface sediments on the same river mile plot without
it getting too messy, I would like to see this. This would provide a
lot of information on one plot.

In addition, I would like to river mile plots developed for upstream
data (Between Ross Island - approximately RM 15.5 - and Willamette Falls
- approximately RM 26).

We also discussed plotting the empirical bioassay data per river mile
similar to what was done for the chemical analysis. I imagine that this
is a straight forward task to plot bioassays per RM similar to what was
done for PEC/TEC

Regarding the 3 different predictive models presented - FPM, LRM and PEQ
Quotient - we agreed that we did not want to get too far into this. This
can be part of the benthic community weight of evidence presentation
(see below). .

Direct Contact Risk to Human Health (Margaret/Ben):

For the 27 beach samples, we will apply the Residential soil PRG.

We
will look at a cancer risk of 10-6 and 10-5 for carcinogens and an HQ of
0.1 and 1.0 for non carcinogens. For sediment samples we will apply the
industrial soil PRGs at a cancer risk of 10-6 and 10-5 for carcinogens
and an HQ of 0.1 and 1.0 for non carcinogens. For the sediment samples,
we are essentially adding the industrial PRG to Ben's distribution plots
and river mile plots.

For direct contact risk to human health, the carcinogens are: Arsenic,
DDT, DDE, DDD, Total PCBs, 2,3,7,8-TCDD and Equivalents, Carcinogenic
PAHs, bis(2-ethylhexyl) phthalate, Aldrin and Dieldrin. The
non-carcinogens are antimony, copper, lead, TBT and non-carcinogenic
PAHs. The PRGs on the risk parameter table are based on a carcinogenic
risk of 10-6 and an HQ of 0.1.

Site Identification (Ben):

Ben has developed a cheat sheet/strip chart that lists sites for both
sides of the river. This needs to be finalized though I think it is a
low priority. For the retreat, I will bring some large maps. As we
identify chemicals above some sort of risk threshold on a RM basis, we
will use sticky notes to develop a list of COIs on a site by site basis.

Surface Water (Jim):

For SW, we need to plot all four SW events separately. The upstream
location (now RM 0) should be identified as RM 16. For PBTs (OC
pesticides, PCBs and dioxins) we should rely only on the XAD data. For
PAHs, we can look at both XAD and "normal" SW. For everything else
(i.e.., metals and bis(2-ethylhexyl) phthalate and TPH) we should rely
on the "normal" SW results. I would like to see total and dissolved
presented. Note that for the XAD results, dissolved = the XAD column
results while total is the sum of the XAD column and filter

results.

Site Specific BSAFs (Carrie):

Site specific BSAFs will be calculated based on field clam, lab clam and lab lumbriculus. Chemicals for which BSAFs will be calculated include: Cd, Cr, Cu, Pb, Hg, Ni, Zn, Total PAH, Total PCB, Total DDT (six), chlordane, gamma-HCH, bis-2-ethylhexyl phthalate, 2,3,7,8-TCDD,dioxin, HCB, TBT, Aldrin, Dieldrin, and PCP. Scatter plots will be looked at.
Look for trend line

Tissue Data (Margaret)

Rivermile plots will be for clams crayfish, and sculpin. We will only look at the nearshore segments. Tissue samples that fall outside the near shore area should be moved to the west or east nearshore segment as appropriate.

Dietary Approach (Carrie):

For fish, we will rely on empirical data for prey and sediment. Use dietary parameters from LWG issue summary table response. We will focus our efforts on Hg, TBT, Zn, Pb and total PAH. If we have time, we can also look at total PCB and total DDT however, this is a low priority.

For calculating the dietary does for fish, we will be looking at clams and worms as the primary prey items. We will focus our efforts on sucker and sculpin since they are the fish that consume benthic prey items exclusively. We will not factor in cannibalism into the sculpin diet. We will look at a diet of clams only, worms only and varying percentages of each. We will apply site specific BSAFs for clams and worms to estimate prey items in areas where we do not have data. We will focus our efforts spatially on 1/10 mile segments, east and west shore, look at average and maximums.

Note: I am unclear how much we will rely on BSAFs. My notes indicate
that we will rely on empirical data but we also discussed the application of BSAFs.

Wildlife: We will look at eagle and mink. Site-wide average based on
dietary ranges. For eagle - four species – 45% sucker, 45% carp, 5%
peamouth, 5%, Northern pikeminnow. For mink – little bit of everything
from LWG response. Chemicals: Total TEQ, Total PCB, Total DDE, bis
2-ethylhexyl phthalate, and mercury. Calculate site-wide HQ.

Summing (Applies to all media):

Dioxin TEQs are available from the DHS study only (adult salmon, sturgeon and adult lamprey). The TEQs we have in QM are based on dioxin
congeners and dioxin like PCB congeners. We will focus our effort on
the total TEQ because it can be easily done in QM. Subsequent to the
retreat, we will need to look into dioxin and PCB congener patterns to
help understand the various sources of these chemicals in the river.

Other chemicals for which summing is an issue include: PAHs, Chlordane,
Total DDD, Total DDE, Total DDT

Chlordane – need to sum the six chlordane chemicals. Results below
detection limit assumed to be zero.

DDD, DDE, DDT – sum 2,4 and 4,4 independently. Sum all six and apply
DDE SLV. Double check values and provide direction.

PAHs – can look at low and high molecular weight as surrogate for non-carcinogenic and carcinogenic PAHs. We will also look a the two
most toxic PAHs (Benzo(a)pyrene and dibenzo(a,h)anthracene) individually. The PRGs presented in the risk parameter table for carcinogenic PAHs are for B(a)P and should be applied to these two PAHs.

Weight of Evidence (Bob):

We are planning on an approximately 2 hour discussion of the WOE approach. This is a precursor to a meeting that we will have

early the
week of February 26th. We will have the following presentations (order
TBD):

Bob presents Row spreadsheet. - 1 hr
Burt presents Rule of 5. - 0.5 hr
Ron presents Calcachieu (sp?) example. - 0.5 hr

Retreat Agenda and preparation:

I will be developing an agenda by the end of the week. Since PMX and
others will be going down to the wire, it will be difficult to provide
materials in advance (Note: If Ben can finnish his cumulative
distribution and river mile plots and spatial maps for the benthic
community chemicals by early next week, I would like to make these
available to the groups so they can become familiar with the data
presentation materials and the spatial distribution of chemicals at the
site).

I think we need to discuss the development of paper materials further.
Although I recognize that developing paper products is time consuming
and somewhat wasteful, my sense is that people will want them. I am not
sure how to best handle this. Any ideas?

Ok - that's my summary. Please get me any comments you may have
asap.

Thanks for all the hard (good) work.

Eric

--
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