To: Robert Law[rlaw@demaximis.com]
Cc: Scott Kirchner[KirchnerSF@cdmsmith.com]; Willard Potter[otto@demaximis.com]; edward.garland@hdrinc.com[edward.garland@hdrinc.com]; James Wands[James.Wands@hdrinc.com]; Marabello, David (MarabelloDA@cdmsmith.com)[MarabelloDA@cdmsmith.com]; Franklin, Elizabeth A NWK[Elizabeth.A.Franklin@usace.army.mil]; Puckett, Katherine A.[puckettka@cdmsmith.com]
From: Vaughn, Stephanie
Sent: Fri 11/13/2015 2:09:56 PM
Subject: RE: Modeling review....

Hi Rob,

I received the following questions from HDR, regarding reproducing the linkage files for the bioaccumulation and CFT models.

We have been able to reproduce the CPG's linkage files in general, but there are some small differences remaining. We also had some trouble compiling the code get_cwcm_waterdepth_v2 .f without making minor edits. Could you send the Fortran compiler version and flags used to compile the codes sent on 10/21? Could you also confirm if a program was used to generate the annual gcm_tran files used by the linkage programs, or were the individual files that make up a given year simply concatenated?

Could you please provide a response?

Thanks,
Stephanie

From: Robert Law [mailto:rlaw@demaximis.com]
Sent: Wednesday, October 21, 2015 10:35 AM
To: Vaughn, Stephanie
Cc: Scott Kirchner; Willard Potter; edward.garland@hdrinc.com; James Wands
Subject: Re: Modeling review....

Response to Question 1):

Yes, the CFT outputs transmitted to Region 2o n December 12, 2014 were used to generate the bioaccumulation model inputs previously transmitted to Region 2, using the steps outlined below.

Response to Question 2):

The steps to generate bioaccumulation model inputs are outlined in a word document within the attached zip file (!BioModel-Input-prep_20151015.docx). Note that the CPG re-arranged the steps within Region 2's email to better reflect the work-flow in the current processing. The Fortran and IDL processors along with the required lookup files and IDL functions are also included in the attached zip file. These files are mostly the same as those transmitted to EPA on March 5th 2015, except we reorganized the folder structure to follow the steps outlined in the instructions, so that it will be easier to follow. We also modified the IDL processors slightly to remove obsolete call statements and un-used IDL functions, and included the complete set of functions needed to run the IDL processors.

Robert Law, Ph.D.
de maximis, inc.
rlaw@demaximis.com
Voice: 908-735-9315
Fax: 908-735-2132

>>> "Vaughn, Stephanie" <Vaughn.Stephanie@epa.gov> 10/6/2015 1:53 PM >>>

Hi Rob,

EPA continues to review Section 7 of the RI report, which relates to modeling. To assist with our review, could you please provide the following:

1) Confirmation that the CFT model outputs provided December 2014 match the bioaccumulation model inputs

2) A copy of the programs used to generate the bioaccumulation inputs from those outputs. Specifically, a description of steps and up to date programs to go from

a. individual time chunk outputs to annual binaries

b. annual binaries to text files input into IDL

c. IDL programs used to process the CFT model output into foodchain inputs (compile_foodchain_inputs.pro, aq_plotting, global01, shp2str and ffill)

d. Monthly foodchain inputs to the steady state calibration inputs

We currently have some of these pieces delivered over the period of time between February 2013 and July 2015, but would appreciate one complete set consistent with the CFT model outputs and foodchain inputs provided.

Please let me know if you have any questions or concerns.

Thanks,
Stephanie