

From: Mark K Sogge/DO/USGS/DOI
Sent: Friday, July 30, 2010 8:03:32 PM
To: Stephen E Hammond
CC: "antonio possolo" <antonio.possolo@nist.gov>; "Bill Lehr" <Bill.Lehr@noaa.gov>; Hunter, Tom; Marcia K McNutt; "Stephen Hammond" <sehammon@usgs.gov>; Sky Bristol; Tim Kern
Subject: Re: oil budget: Continue to expect an estimated range

Hi Steve, Sky -

I did not mean to imply a single value as the final endpoint. More likely, a consensus value plus/minus some percentage.. which still ends up with a range. Presenting only a single number would imply more precision than we can justify.

Until we are told otherwise, I would assume that we will still be working with an estimated range (though with narrower bounds than our current 35,000 - 60,000).

Mark

Mark Sogge
Deputy Chair, NIC Flow Rate Technical Group
Chief of Staff, USGS Western Region
2255 Gemini Drive, Flagstaff, AZ 86001
Cell: [REDACTED]; FAX: 928-556-7266
mark_sogge@usgs.gov

From:	Stephen E Hammond/GEOG/USGS/DOI
To:	Sky Bristol/RGIO/USGS/DOI@USGS, Marcia K McNutt/DO/USGS/DOI@USGS
Cc:	"Bill Lehr" <Bill.Lehr@noaa.gov>, Mark K Sogge/DO/USGS/DOI@USGS, Hunter, Tom Tim Kern/BRD/USGS/DOI@USGS, "Stephen Hammond" <sehammon@usgs.gov>
Date:	07/30/2010 06:56 PM
Subject:	Re: oil budget

Good work Sky. You are right on top of this. I just spoke to Mark Sogge. He indicated the single value is where things are headed. It sounds like the team will deliver a table of daily estimate from day 1 until the valve was closed. Desire would be to plug in those values.

The desire is to have the model out asap after deliver to you all. A good bet would be delivery of a finished product by 2pm edt. So we need to make sure requirements are understood to modifications are completed well ahead of the data being delivered.

Are modelers and application developers on standby?

Sent from my BlackBerry Wireless Handheld

From: Sky Bristol [sbristol@usgs.gov]
Sent: 07/30/2010 05:31 PM CST
To: Marcia McNutt

**Exhibit No.
8835**

**Worldwide Court
Reporters, Inc.**

Cc: Bill.Lehr@noaa.gov; Mark Sogge; Hunter, Tom; antonio.possolo@nist.gov; Stephen Hammond; Tim Kern
Subject: Re: oil budget

Got it. That makes a lot more sense. Sorry for throwing so much superfluous detail at you the last time.

First question: Do we still want to express the oil budget as a range or take the best estimate of total flow and run that through the model to produce one overall executive summary and associated graphics based on that one value? It sounds like the latter.

Your overall concept of setting the initial rate and then reducing it by a factor each day would be quite simple to implement. It would be best to set this as a global variable in the application based on the Flow group's guidance than putting it back on the Coast Guard to maintain as a daily variable.

If you can let us know what initial rate to start with, whether or not that will still be an estimated range, and by what fraction to reduce each day, we can get the application retooled. This should not impact the model itself in any way, just the input variables. We'll still be expressing a mean in terms of the oil fate factors in the executive summary and the main barrel graph along with a little bit of the background showing upper and lower confidence bounds.

Thank you, and let us know.

<((((<<<<~~~~<((((<<<<~~~~<((((<<<<
Sky Bristol
sbristol@usgs.gov
Office: 303-202-4181
Cell: [REDACTED]
<((((<<<<~~~~<((((<<<<~~~~<((((<<<<

On Jul 30, 2010, at 4:59 PM, Marcia K McNutt wrote:

Sky -

We don't need to do a finer step than daily. What the Flow group is talking about is going back to Day 1 to account for the fact that the reservoir has been gradually depleting itself. So if we have our best estimates of flow toward the end, we can adjust that rate for higher values earlier on. Furthermore, at other times in the event there were changes to the well head configuration that had a modest effect on the flow that can also be factored in.

So what is the easiest way for the information to be given so that the Oil Budget Calculator can take the input? Is it an initial rate, and then a percentage of that rate? e.g. 63,000 barrels on day 1, and then reduce it by a certain fraction of a percent each day?

Marcia

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS

(bb)
(cell)

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS

Subject: Re: oil budget

I saw a note from Steve Hammond on this as well.

All daily variables entered by the Coast Guard and the model itself are currently based on a daily time step. After the cap went in, we modified the daily variables part of the application to accept a fraction of the set flow rate - 35,000 to 60,000 bbl/day. Setting a factor of 0.4 would result in 40% of each daily flow rate value being passed to the model, resulting in 14,000 and 24,000 bbl/day, respectively. This provides the USCG Situation Unit staff managing daily variables a way to record dynamics in the flow on a daily basis.

I've attached the current spreadsheet output of daily values. You will see the adjustment to 60% of flow made on July 15 and then the adjustment to 0 flow since that time. Prior to July 15th, the flow rate remained constant per the decision by the Flow Rate Technical Group and the guidance we were given.

If we need to record flow rate on a finer time step than a daily average, we can pretty easily modify the application to do so. If we need to actually analyze the oil fate dynamics on that finer scale, we will need to work with Antonio and the NIST team on a modification to the model and change the output in the application rather significantly.

I hope this clears things up. Please call my cell phone if you need any further clarification or we need to take some action right away.

Sky Bristol
sbristol@usgs.gov
 Office: 303-202-4181
 Cell: [REDACTED]

IGS606-048548

TREX 008835.0003

On Jul 30, 2010, at 4:22 PM, Bill Lehr wrote:

Sky and Antonio, and problem with a daily flow rate?


On 7/30/10 2:53 PM, Marcia K McNutt wrote:

Bill -

Are you SURE that the oil budget doesn't take a variable rate? I thought that you could change the rate each day if you wanted to.

Marcia

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS

Dr. Marcia K. McNutt
Director, U.S. Geological Survey
12201 Sunrise Valley Drive MS 100
Reston, VA 20192
(703) 648-7411 (office)
(703) 648-4454 (fax)
 (bb)
(cell)

www.usgs.gov

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS