

Coastal Response Research Center

Modeling Working Group

November 18, 2009 (in conjunction with Clean Gulf)

NOTES

Participants:

Nancy Kinner, CRRC/UNH
Deborah French McCay, ASA
Kurt Hansen, USCG
Bill Lehr, NOAA
Jim Clark, ExxonMobil
CJ Beegle-Krause, Research4D
Amy Merten, CRRC/NOAA

I. Introductions

II. Background:

- June 2006 first modeling meeting – major modelers met together
- Subsequent workshop (Sept 16-17, 2008)
- Organizing Committee (OC) formed
- OC divided project into 4 sub topics. Sub-groups formed on each topic. These were the focus of the 2008 workshop.
- Goal is to: write a white paper on 'Needs for the Next Generation Modeling'

III. Group Reports:

- Biological Effects Subcommittee (Debbie French McCay)
 - This group has a an outline & has started writing their section; the SIMAP write up is done
 - The bird group has sent a first draft (DFM is currently reviewing this; rewrites and follow-ups as needed)
 - TriState Bird has submitted their literature review and Deb must incorporate this into the write-up
 - Drafts are still pending from Kate Clark, Rob Ricker and Jim Clark
- Physical Transport Subcommittee (CJ Beegle-Krause)
 - Draft is completed for several sections (pending comments from Michel)
 - Don Danmeier funding runs out soon; CJ will send email to Danmeier (cc: CRRC) requesting status on his submission
 - This group has had a number discussions regarding the inclusion of lagrangian models to use for best practices
 - Discussion pursued regarding how to use/separate 2D or 3D (currently only using 2D due to numerical dispersion problem); is the focus to help someone to buy a model, offer a comparison?
 - After group discussion, it was agreed that 3D should be included. The group will focus and complete the 'Best Practices' section before going forward on 'Next Generation' and 'Research Gaps'
 - Also waiting for Pooji's paper

- Physical Fate and Behavior Subcommittee (Bill Lehr)
 - Had a sub-group meeting, discussed similar plan to CJ's outline template
 - But received minimal responses and follow-up to this
 - Joe Katz, Ali Khelifa, Ed Overton, Jim Payne – need detailed marching orders
 - Holding for Mark Reed's response - agree with outline? how to proceed with tasks?
 - Need to format process (detail, depth, etc)
- Spill Response Modeling Subcommittee (Debbie Payton)
 - The end of December deadline is not feasible
 - Have completed model comparison (need to send to CJ)
 - Wolfgang is waiting for Debbie's input
 - Response options: skimming, burning, booming, and dispersing
 - Not talking about different types of booms, but rather how booming differs with burning, etc.
 - Model will not consider over-washing, or parameters regarding when the boom will fail

IV. Discussion

- Discussion of outline template appropriateness for each group; CJ will combine/update and then send this to all the Uber Group for review
- Discussion on including 3D... (in State of the Art section); recommendations on what OC thinks 3D needs; specify properties of each LE; this is where we think the state of the art should be; biological effects needs 3D; a chapter on what do we really need to do – parameters, duration of exposure, recovery, (process vs. empirical vs. theoretical); need to know behavior of birds so there is a lit review on that, etc. The final chapter review of missing information to support model capabilities.

V. Tasks

- Nancy will talk to Michel Boufadel & Mark Reed
- CJ and Kathy will follow-up with Pooji, Dan Danmeier
- CJ also needs Mark Reed's model comparison, resend to Mark
- Amy will follow-up with Debbie Payton, Kate Clark, Rob Ricker on their deadlines

VI. Next meeting – postpone Dec 11 and move to January 11 @ 11am ET