Science and Technology Subcommittee
New Chair: Faith Fitzpatrick fafitzpa@usgs.gov

1) Vendor protocol
2) In situ burning (ISB)
3) Fate/transport
4) Endangered Species Act Response Operations Matrix Screening Tool
5) New items
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1) Vendor protocol

- Scott Binko lead (1-page overview), subcommittee approval at fall 2018 meeting
- Vendor process for presenting new technologies to the RRT.
- Steps for approval: 1) contact RRT5 coordinator, 2) coordinators work with S&T subcommittee, S&T may accommodate vendor presentation at RRT5 meeting or webinar
- Next steps:
  - Post vendor protocol on RRT5 web site with a button or something obvious
  - Mention at NRT meeting next week
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2) In Situ Burning (Scott Binko/Eric Pohl) leads

- Form S&T working group – operational, air, flora/fauna, application to other regions, include industry
  - Assemble what’s happening – chance to give input on objectives and output
  - Provide permitting support – have data available for what is needed to fulfill permits. big proponent is photos/visual aids, especially in tourism areas – offshore and coastal/shoreline
  - Put together scope for working group
  - Provide list of questions for ISB demonstrations

- Questions on permitting process with states
- Multiple trainings/exercises in ISB happening
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2) **In Situ Burning (cont.)**

- Aug 2017 Mackinaw City TTX – multiple docs generated
- Nov 2018 – ACOE cold regions lab Hanover, NH – cold water burns led by BSEE – arctic conditions
- March 2019 CG R&D Joint Marine test facility, Mobile AL – small burns on fresh water
- Jul 2019 ACOE cold regions lab – incorporate waves and veg, mesoscale, inform design of full scale in Sept
- **Sep 2019 CG R&D joint marine test facility** – large scale burns, 3.5’ water, variable oil thickness, waves, veg, air monitoring
- Ongoing SL Ross lab – ignitability of fresh, weathered, and emulsified samples
- Ongoing – International Institute for Sustainable development Canada experimental lakes – multiple burns, started summer 2018
2) In Situ Burning (cont.)

• Next steps: Email invitation for workgroup participation soon. Set up web call.
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3) Fate and Transport – Faith Fitzpatrick lead

- Quickly developing and changing environment of tools and models
- No unified approach for rapid modeling, various tools and models used amongst various gov’t agencies, industry, and contractors

Next steps:
- Hold webinar in late summer or fall to present available data sources on time of travel, velocity, tools, and modeling approaches. Multiple presentations, drawing on Dec 2017 USGS workshop.
- Develop contacts with FEMA/IMAC
- Align with EPA’s 4 models in the water division
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4) **Endangered Species Act Response Operations Matrix Screening Tool** - Lindy Nelson and Jerry Popiel leads

- Matrix tool developed. Links endangered species with response action and level of impact it might have on that species.
- Consensus in fall meeting for developing in RRT5
- Still deciding on whether they go on web site or as appendix for area plans
- Form workgroup that spans R&T and planning subcommittees
- Next step to have planning call and possible in person meeting.
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5) **Additional topics**

- **USCG R&D**
  - awaiting submerged oil recovery/underwater booming report (?)
  - Oil in Ice Center of Excellence – continued discussion
  - Research repository, library for RRT5 on web site

- Exercises – S&T make more effort to get after action items, is there better way for S&T to track and follow up?
5) **Additional topics (cont.)**

- Training needs
  - Tribal jurisdictions and communication (maybe belongs with planning)
  - Sinking oil training needed
  - Ethanol/biofuel spill training – on website?
  - Talk with training subcommittee on leads

- Recent IJC report on ecological impacts of crude oil in Great Lakes

5) **Additional topics (cont.)**

- Unmanned aerial systems – use growing exponentially – agency restrictions vary. Uses in situational awareness, operations, science, monitoring, fate/transport. Have webinar in the fall on examples of usage, including air monitoring.

- Shoreline cleaner – past use was very successful, find report, develop a pre-approval?
5) **Additional topics (cont.)**

- Additional S&T issues or topics from Clean Waterways conference?
- Linkages to Blue Accounting Source Water Initiative (GLC/TNC) – protecting drinking water at its source [www.blueaccounting.org](http://www.blueaccounting.org), Program Manager = Nicole Zacharda
  - Minimizing nutrient inputs, instituting source water protection plans, preventing and responding to spills, monitoring and addressing emerging contaminants, building binational consistency

- Please email Faith Fitzpatrick [fafitzpa@usgs.gov](mailto:fafitzpa@usgs.gov) with questions and ideas, follow-up