Greetings ITAT participants,

Since our last face-to-face meeting on May 11, 2016, we have been thinking about how the Integrated Trends Analysis Team could support more information exchange across our research communities, while holding to the model of two face-to-face meetings per year. As the ITAT organizers, we have decided to produce periodic email blasts to inform our membership of relevant active research projects, webinars, upcoming events, and recent research findings.

If you have anything that you would like us to include in our next ITAT blast (a recent publication, an upcoming presentation, an active project related to trends analysis and explanation, etc) please send a brief description to Kyle Hinson (khinson@chesapeakebay.net). If you would like to be removed from this email list, please email Kyle with the email subject topic "unsubscribe from ITAT emails".

Sincerely,

ITAT Organizers (Jeremy Testa, Joel Blomquist, Jeni Keisman)

ACTIVE RESEARCH (Lead contact)

- **Potomac synthesis effort (Lora Harris)**
  This effort is addressing key questions regarding how trends in non-tidal water quality are connected with tidal water quality in the Potomac estuary, what factors are influencing those trends, and how changes in these factors have affected Potomac estuary functions
- **SAV synthesis effort (JJ Orth and Bill Dennison)**
  This effort involves a multivariate analysis and synthesis of the trajectories and rates of SAV change, the regional factors important in controlling changes in SAV distribution, the pressures on SAV ecosystems responsible for their losses or gains, and the life history traits that render them vulnerable.
- **STAC Water Clarity Trends workshop (Larry Sanford, Peter Tango, Jeni Keisman)**
  This workshop seeks to advance our understanding of controls on estuarine water clarity by integrating new insights on sediment transport and loading, eutrophication, characteristics of suspended materials, and their influence on long-term patterns in estuarine water clarity. Relationships between water clarity and SAV distribution will also be addressed.

WEBINARS

Do you have some results that you'd like to share with other ITAT participants or with the Chesapeake Bay Program community? If so, let us know about it! We can help you reach the right audience.

UPCOMING EVENTS

National Nonpoint Source Monitoring Workshop, August 23-25, 2016, Salt Lake City, Utah
A forum for sharing information and improving communication on controlling and tracking NPS pollution at its source and in receiving water bodies. https://water-meetings.tetratech.com/NPS/index.htm

Are you presenting research at an upcoming meeting or conference? Send us your title and session information, and we will list it in our next blast!

RECENT PUBLICATIONS

Abelson, A., B. S. Halpern, D. C. Reed, R. J. Orth, G. A. Kendrick, M. W. Beck, J. Belmaker, G. Krause, G. J. Edgar, L. Airoldi, E. Brokovich, R. France, N. Shashar, A. de Blaeij, N. Stambler, P. Salameh, M. Shechter and P. A. Nelson. 2016. ***Upgrading marine ecosystem restoration using ecological-social concepts.*** Bioscience 66:156-163. doi: 10.1093/biosci/biv171.

Ensign, S.H., G.B. Noe, C.R. Hupp, K.J. Skalak. 2015. ***Head-of-tide bottleneck of particulate material transport from watersheds to estuaries.*** Geophysical Research Letters 42(10): 10671-10679. http://onlinelibrary.wiley.com/doi/10.1002/2015GL066830/full

Garcia, A.M., R.B. Alexander, J.G. Arnold, L. Norfleet, M.J. White, D.M. Robertson, and G. Schwartz. 2016. ***Regional effects of agricultural conservation practices on nutrient transport in the Upper Mississippi River Basin.*** Environmental Science & Technology: http://pubs.acs.org/doi/pdf/10.1021/acs.est.5b03543

Gurbisz, C., W. M. Kemp, L. P. Sanford, and R. J. Orth. 2016. ***Mechanisms of storm-related loss and resilience in a large submersed plant bed.*** Estuaries and Coasts 39:951-966. DOI 10.1007/s12237-016-0074-4.

Harding, L.W., M.E. Mallonee, E.S. Perry, W.D. Miller, J.E. Adolf, C.L. Gallegos, and H.W. Paerl. 2016. ***Variable climatic conditions dominate recent phytoplankton dynamics in Chesapeake Bay.*** Nature Scientific Reports: http://www.nature.com/articles/srep23773

Harding, L.W., C.L. Gallegos, E.S. Perry, W.D. Miller, J.E. Adolf, M.E. Mallonee, and H.W. Paerl. 2016. ***Long-term trends of nutrients and phytoplankton in Chesapeake Bay***. Estuaries and Coasts 39: 664-681. http://link.springer.com/article/10.1007/s12237-015-0023-7

Kendrick, G., R. J. Orth, J. Statton, R. Hovey, L. Ruiz Montoya, R. Lowe, S. Krauss, and E. Sinclair. 2016. ***Demographic and genetic connectivity: the role and consequences of reproduction, dispersal and recruitment in seagrasses.*** Biological Reviews. 000–000. doi: 10.1111/brv.12261

Lefcheck, J. S., S. R. Marion, A.V. Lombana, and R. J. Orth. 2016. ***Faunal communities are invariant to fragmentation in experimental seagrass landscapes.*** PloS ONE. 11(5): e0156550. doi:10.1371/journal.pone.0156550.

Reynolds, L. K., M. Waycott, K. J. McGlathery, R. J. Orth. 2016. ***Ecosystem services returned through restoration.*** Restoration Ecology. doi: 10.1111/rec.12360.

Schmitt, E. L., M. W. Luckenbach, and R. J. Orth. 2016. ***Predator-prey Interactions in a Restored Eelgrass Ecosystem: Strategies for Maximizing Success of a Reintroduced Species, Argopecten irradians.*** Restoration Ecology. doi: 10.1111/rec.12353 Supporting information at: http://onlinelibrary.wiley.com/doi/10.1111/rec.12353/suppinfo

van Katwijk, M. M., A. Thorhaug, N. Marbà, R. J. Orth, C. M. Duarte, G. A. Kendrick, I. H. J. Althuizen, E. Balestri, G. Bernard, M. L. Cambridge, A. Cunha, C. Durance, W. Giesen, Q. Han, S. Hosokawa, W. Kiswara, T. Komatsu, C. Lardicci, K. S. Lee, A. Meinesz, M. Nakaoka, K. O'Brien, E. I. Paling, C. Pickerell, A. M.A. Ransijn, and J. J. Verduin. 2016. ***Global review of seagrass restoration and the importance of large-scale planting.*** Journal of Applied Ecology 53:567-578. DOI: 10.1111/1365-2664.12562.

Zhang, Q., W.P. Ball, and D.L. Moyer. 2016. ***Decadal-scale export of nitrogen, phosphorus, and sediment from the Susquehanna River basin, USA: Analysis and synthesis of temporal and spatial patterns***. Science of the Total Environment Volumes 563-564: 1016-1029. http://www.sciencedirect.com/science/article/pii/S0048969716305289