**Pulse Outline for 2013**

**Pulse of the Bay**

**Theme: Contaminants of Emerging Concern**

**Articles**

* Management
  + Overview article – Fono, Mumley, Feger, Gina Solomon, Raphael, North, Moran, Meg Sedlak, Werme, Klosterhaus
    - Water Board Strategies (R2 policy, State Strategy)
      * Sidebar
        + Blue Ribbon Panel
    - Green Chemistry
* Science
  + RMP CEC Synthesis Highlights – Werme, Sedlak
    - Sidebars
      * CEC Strategy
      * Nonylphenol
      * Fipronil
      * PPCPs
      * Pyrethroids
      * PBDEs – Contaminants of diminishing concern
      * Brominated dioxins
  + NMW California CEC Study – Davis, Dodder, Maruya
    - Sidebars
      * Pro Bono Bivalve Study
      * North vs South comparison
      * PAHs in NOAA mussels after oil spill (from Dominic Gregorio)
      * Broadscan Screening for CECs - John Kucklick et al., Werme
      * Long-term trends in legacy pollutants
  + PFOS in San Francisco Bay - Sedlak

**Latest Monitoring Results**

* Mercury
  + Schwarzbach - mercury in rail feathers
  + SWAMP Coast Survey
  + Weiss – methylmercury in fog - <http://news.sciencemag.org/sciencenow/2012/03/beware-the-fog.html?ref=hp>
* Nutrients
  + Bill Dennison data: Chesapeake, Australia - <http://www.sciencedirect.com/science/article/pii/S0025326X08005304> Mike C 3/29/12
  + Microcystin in the Bay
* Loadings – summarize latest estimates (spreadsheet model for tribs, etc.) – compare to previous estimates and TMDL allocations
* Sediment
  + Sand grain movement, Grain size – Barnard et al 2012 map and figures (grain size in Pulse folder)

**Trends at a Glance – Possible Additions**

* Dredging graphs: check LTMS 2012 program review background info; Sandra scoggin 3/26
* Pacific decadal oscillation?
* El Nino?
* Clapper rails
* Clam predators
* Clams
* Shellenbarger and Schoellhamer 2011? Salinity and temperature
* Pacific herring
* English sole
* Salmon
* Populations of Traditional v. Exotic species
* Water export rates from the Delta
* Net depositional/ erosional by smallest size feasible
* Acreage of marshland/ wetlands – correlation with nutrients?
* Clapper rails and predators
* HABs
* Trash impacts and loadings
* People population
* Musk, perfumes, deodorant effects on aquatic life
* Impacts of Water Diversion Project
* Population
* Wetland acres total
* Land cover/ land use
* Impervious acres
* $ spent vs. % improvement
* More information broken out by bay segment, eg. NH3, phytoplankton biomass and speciation
* Why start all y-axes at 0?
* N. and S. Bay multi-station rainfall + flow (daily) index
* Benthos prey/ benthos abundances over time eg. RMP sediment triad data
* We need to monitor the far field response of the South Bay to salt pond restoration. We can expect greater tidal prism and erosion of channels to accommodate circulation. What will that mean to DO, cholorphyll, etc?
* Results of wetland management, development, and MeHg production

**Miscellany**

* Porpoises <http://science.kqed.org/quest/audio/porpoises-return-to-san-francisco-bay/>
* Hypsographs of the Bay – Mike Connor suggestion Meg 5/8/12

## **SCHEDULE**

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| **STEP** | **DUE DATE** | **Time Allotted (weeks)** |
| First Draft of Articles to Jay | Mar 28 |  |
| Jay comments to authors | Apr 4 | 1 |
| Revised Draft Out for Review to TRC, SC, etc. | Apr 18 | 2 |
| Review Comments Due | May 9 | 3 |
| Text and Graphics to Linda for Layout | May 23 | 2 |
| Prepare Laid-out Version for Internal Review (+ select individuals) | Jun 20 | 5 |
| Internal Review Comments Due | Jun 27 | 1 |
| Final Review of Laid-Out Version by TRC and SC | Jul 5 | 1 |
| TRC and SC comments due | Jul 12 | 1 |
| Sent to Printer | Aug 9 | 4 |
| Printing - Pulses in Hand | Aug 30 | 3 |
| Annual Meeting | Oct xx? |  |
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