

San Gabriel River Regional Monitoring Program  
Technical Stakeholder Group Meeting  
March 15<sup>th</sup>, 2016

Attendees:

Phil Markle, LACSD  
Emiko Innes, LACDPW  
Dena Giacomini, LACDPW  
Chris Lopez, LACDPW  
Michael Lyons, LARWQCB  
Stuart Goong, OCPW  
Rita Abellar, OCPW  
Rich Gossett, IIRMES  
Rachael Hanson, IIRMES  
Scott Johnson, Aquatic Bioassay  
Karin Patrick, Aquatic Bioassay

1. Action Items from February, 2015 meeting.
  - a. Prey fish special study:
    - i. Karin has contacted Gary Ichikawa about the sampling effort to collect prey fish
  - b. Website homepage screen shot to Phil
    - i. Scott has sent the homepage screen shot to Phil for review
  - c. Website threshold meeting
    - i. Scott reviewed the thresholds at this meeting
2. SGRRMP Bioaccumulation Prey Fish Proposed Special Study
  - a. State analyzed 2-3 composites of prey fish per lake
    - i. Composites are made up of 10 fish, < 100 mm
    - ii. There would not be a field price increase unless we increase the number of composites
3. SGRRMP 2016 Bioaccumulation Sampling
  - a. La Mirada Lake
    - i. LARWQCB (Michael Lyons) will sample this lake in 2016
      1. Target species are largemouth bass, carp and prey fish
    - ii. SGRRMP will also sample La Mirada Lake in 2016
      1. The SGRRMP will analyze a total of 8 composites of fish
      2. Karin and Michael will coordinate the sampling effort to increase the number of fish analyzed in 2016.
      3. The SGRRMP will analyze approximately 2 – 3 composites of prey fish
4. 2016 QAPP
  - a. The 2016 QAPP will be finalized on March 18<sup>th</sup> and posted to [www.sgrrmp.org](http://www.sgrrmp.org)
5. Web Portal Functional Design

- a. Development Update
  - i. The website homepage was shown to the TSG
    1. Map – We should add a few landmarks to the map (e.g. reservoirs, dams, other waterbodies), however we don't want the map to start looking too cluttered
    2. Add a Publications and Presentations link
    3. Colors of pie charts
      - a. Change colors from green, yellow and red to hues of one color (i.e. blue)
  - ii. Web portal
    1. LADPW would like to know who is downloading the data, including the person, agency and email
      - a. Require users to enter this information before viewing/downloading the data and email it to interested parties in the TSG
    2. Contact person
      - a. Add an email address for site visitors who want additional information or have questions about the data results
      - b. Scott Johnson will have his email address added to the website and he will direct peoples questions to the appropriate agency/person
    3. Frequently Asked Questions (FAQ)
      - a. Add a FAQ page to the web portal
  - iii. Thresholds (Question 1)
    1. Citations
      - a. Add threshold citations to maps
    2. CSCI Scores (Benthic Macroinvertebrates)
      - a. Thresholds are from *The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams* (SWAMP Technical Memorandum; Rhen et al., 2015)
    3. Riparian Zone Condition (CRAM)
      - a. Thresholds are from *Bioassessment of Perennial Streams in Southern California: A Report on the First Five Years of the Stormwater Monitoring Coalition's Regional Stream Survey* (SCCWRP Technical Report 844, 2015)
    4. Metals & Organics (Freshwater Results)
      - a. Copper CTR Exceedances
        - i. Thresholds are from *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and*

*Estuaries* (California EPA and State Water Resources Control Board, 2005)

- b. Selenium CTR Exceedances (Inland Water Basin Plan?)
    - i. Thresholds are from *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries* (California EPA and State Water Resources Control Board, 2005)
  - c. Other Metals and Organics
    - i. Metals -We are not going to post these as pie charts, however we will note that 13 other metals were below exceedances
    - ii. Organics- We are not going to post these as pie charts, however we will note that organophosphorous and pyrethroid pesticides were measured, but mostly below detection.
5. Toxicity
- a. Use Test of Significant Toxicity (TST) Evaluation
    - i. Thresholds from *Test of Significant Toxicity: A Statistical Application for Assessing Whether an Effluent or Site Water is Truly Toxic* (Denton et al., 2011)
6. Program Redesign (Question 1 and 2) (see attached presentation)
- a. After 10 years of monitoring, the TSG would like to change the monitoring design of this program to fill in knowledge gaps
    - i. Learn more regarding stream condition change overtime without losing current ambient condition information
    - ii. Understand how management practices or natural phenomenon affect stream condition over time
    - iii. Better understand the status of non-perennial streams
  - b. Current Program
    - i. Ambient Condition (2008 to 2014)
      - 1. Ambient condition of perennial streams in watershed is well understood
    - ii. Trend Conditions (2005 – 2014)
      - 1. Ambient condition or fixed site trends is less clear than the ambient condition of perennial
        - a. The ambient program is not designed to detect change within a reasonable time frame (5 to 10 years)
        - b. Trend sites are either highly variable (e.g. below Morris Dam, post fire sites) or show no change over the time period (i.e. Coyote Creek, concrete lined channel)
        - c. The sites originally chosen to detect trends in stream condition over time is not linked to management or policy practices

- c. Proposed Plan
  - i. Learn more regarding stream condition change over time without losing ambient condition information
    - 1. Except for remote areas of watershed (e.g. Bear Creek Canyon) good sampling coverage over the past ten years (~ 90 sites)
    - 2. Change in ambient condition not detected over ten years; addition of new random sites will not increase our power to detect change
  - ii. Standard Random Sites
    - 1. Begin revisiting 10 to 20 standard random sites per year, working down the sampled site list since 2008
      - a. Many sites, few visits approach
      - b. Improves power to detect change in ambient conditions over a 4 to 5 year period
      - c. Maintains ability to assess current ambient condition
  - iii. Special Random Sites
    - 1. Select 5 special random sites that have previously been sampled and revisit each year for 5 to 10 years
      - a. Few sites, many visits approach
      - b. Link selected sites to condition, known variability, regulatory issues
      - c. This will provide
        - i. An understanding of how management or natural phenomenon change conditions at the sites
        - ii. Allows us to quantify variability at each site
  - iv. Non-perennial streams
    - 1. Revisit up to 5 non-perennial sites previously not sampled
      - a. Use random site list (since 2008) to determine non-perennial streams that were not sampled
      - b. Measure parameters based on flow at the time of revisit
        - i. Dry Site: CRAM only
        - ii. Limit flow: CRAM, water chemistry, toxicity
        - iii. Good flow: CRAM, water chemistry, toxicity, BMIs, algae and physical habitat
- d. Budgets and Resources
  - i. Constraints
    - 1. Fully implemented plan would exceed entire budget of the SGRRMP
    - 2. We want to ensure there is money for special studies
    - 3. Key areas to address
      - a. Drop number of sites in each category
      - b. Drop parameters, for example:
        - i. Water toxicity

- ii. Attached algae
  - iii. CRAM at unique sites
  - iv. Reduce the number of swim safety sites
  - v. Eliminate sentinel site bacteria analysis
- e. Next Steps
  - i. Discuss constraints and how many special random sites might be included
  - ii. Determine how to meet in-kind services and agreements of TSG members (OCPW and LACPWD)
    - 1. OCPW might be able to absorb cost into their TMDL program if the site chosen has a current TMDL (i.e. Coyote Creek)
  - iii. Timeline
    - 1. March, 2016 - Work with SGRRMP TSG on framework and details
    - 2. May, 2016 – Create workplan and budgets
    - 3. August, 2016 – Approve budget
    - 4. 2017 – Work begins using new design

#### **Action Item List**

1. Bioaccumulation – Karin will follow-up with Michael Lyons and Rich Gossett regarding LARWQCB and SGRRMP bioaccumulation sampling at La Mirada Lake
2. Thresholds – Pie Charts
  - a. Use a different word than “Exceedance”
  - b. Add a citation to each threshold
  - c. Make sure to note that these are not regulatory thresholds
  - d. Add a contact email for questions regarding pie charts or downloaded data
  - e. Add a FAQ page
3. Run TST for toxicity results (2008+)
4. Provide TSG with random site results and coordinates (including CSCI scores, P-Hab, Chemistry etc.)