

Presentation to SWRCB
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Additional Issues

- What data do we have, and what can we do with those data?
- Need to design additional data collection sampling protocols with the statistics and end goal in mind
- How to evaluate ability to comply?
- Time frames?

Existing data in SWRCB database

- Grab sample data for TSS, conductivity, pH, and either organic carbon or oil & grease
- One sample/storm
- Little information on storm size, BMPs in place, etc.
- No data for other constituents
- May be sufficient to set Action Levels, depending upon how those levels will be used

Additional data

- Individual facilities (small number)
 - Grab sample data for additional constituents (one per storm)
 - Few composite, or time-dependent, samples
 - Little information on between-storm variability, importance of additional factors (storm size, treatment controls, etc.)
- No broad, controlled data collection that would allow comparison of facility types, regions, hydrologic influences, etc.

Main concerns with existing data

- Single grab samples can't characterize variability
- Data are very limited for most constituents
- Need far more samples to characterize distributions
 - Statistical design considerations (Dr. Lorden)
 - Need data on similar temporal scale to objectives (e.g., acute criteria are 1-hour averages)
 - Need to characterize variability within storm, between storms, and spatially

Design for additional data collection

- Must consider end goal and path to goal
 - Type of limit
 - Monitoring strategy (grab samples v. composites)
 - Compliance strategy (grab samples v. more intensive monitoring)
 - Methods to be used to develop limits (statistical method or dynamic modeling)
- Should gather enough data to be statistically representative, and to allow for extreme events/concentrations not in initial database

How to evaluate ability to comply?

- Determine volume/flow rate to be treated
- For volume/flow treated, assess treatment efficiency
 - Consider dissolved v. total
 - Evaluate impact of influent concentrations and composition
- Assess water quality of combined effluent (fraction treated + fraction bypassed)

Time frames? (Best guess without better program definition*)

- Action Levels (0-3 years)
 - Determine amount/type of data needed
 - Existing data may be adequate for some constituents
 - How they'll be developed and used would determine timeframes
- TBELs (4-6+ years)
 - 1-2 years to design program, develop limit calculation methodology
 - 2-3 years of data collection
 - 1+ year to calculate limits and place them into permits (design/construction of controls may require additional time)
- WQBELs (7-10+ years)
 - 2-3 years to design program, develop methodology
 - 3-5 years of data collection
 - 2+ years to calculate/implement limits (design/construction of controls may require additional time)

*Timelines will depend upon process for limit development, including availability of funding for monitoring, workgroup development, peer review requirements, etc.

