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What is required to set numeric limits for storm flows?

- Current data are inadequate for establishing numeric limits
- Different types of numeric limits are possible
- Data needs will depend upon:
 - Type of limit to be developed
 - Methodology to be used to establish numeric limits
 - Monitoring and compliance strategies

Options for storm water regulation

Continue to implement and improve iterative BMP approach

BMPs with "action levels" (ALs)

Technology-based effluent limits (TBELs)

Water Quality-based effluent limits (WQBELs)

Data needs

Time required

Level of difficulty

Option 1: Iterative BMP process

- Evaluate and select appropriate BMPs
- Compliance and enforcement based on BMP implementation and maintenance
- Examples of data needed:
 - BMP unit design and efficiency
 - Design criteria ("design storm")
 - Gross receiving water quality
 - Monitoring design
 - Maintenance and enforcement options

Option 2: BMPs with Action Levels

- ALs to identify "bad actors" and trigger iterative approach
- Examples of additional data needed:
 - Process and procedures for setting ALs
 - Actions required when ALs are exceeded
 - Data on constituent concentrations
- SWRCB database *may* be sufficient for ALs for some constituents

Option 3: TBELs

- Implementation would consider:
 - Volume/flow to be treated (design conditions)
 - Efficiency of treatment
 - Influent water quality
- Examples of additional data needed:
 - Detailed influent water quality characterization
 - BMP and treatment performance data
 - Process for setting TBELs (to consider variability of storm flows)
 - Monitoring and compliance options

Option 4: WQBELs

- Must consider variability (dynamic modeling or statistical approaches)
- Examples of additional data needed:
 - Detailed effluent quality and flow data
 - Detailed receiving water quality and flow data
 - Means of compliance
 - Methodology for RPA and calculating limits
 - Development of monitoring strategies and enforcement options
- TMDL considerations

Additional considerations

- Data needs must consider
 - Type of limit
 - Methods for setting limits
 - Monitoring and compliance strategies
- Different types of limits will have different compliance strategies, implications, timelines
- Gary Lorden will provide additional detail on statistical/design considerations