

Step 1: Pesticide Use Data



Step 2: Reference Values



Step 3: Preliminary Ranking (Ratio of Pesticide Use to Reference Value)



Top Tier (#?) = Watershed EO list

Step 4: Evaluate EO List Pesticides for Coalition Watershed(s)



Monitoring Recommendations

- 1A. Obtain data from DPR Pesticide Use Reporting (Cal-PIP)
  - Sum total 3 years of data for coalition watershed(s)
- 1B. Data Cleanup – Remove anomalies, obvious errors
- 1C. Exclusions:
  - Small quantities (<500 pounds)
  - Oils, Clays, Polymers, Sulfur, Solvents, Biopesticides, Soaps, Mineral Salts (but not metal salts)



- 2A. Identify chemical form in water if different from pesticide
  - Group chemicals with the same toxicant in water (e.g., copper, 2,4-D, glyphosate)
- 2B. Identify relevant degradates and contaminants
  - Estimate quantity or assume 100% quantity is most toxic chemical (EPA “Total toxic residue” approach)
- 2C. Obtain reference values (see detailed description)
  - Both aquatic life & human health values
  - Human health values include drinking water & food
  - Note data gaps



- 3A. Two Calculations: aquatic life, human health
  - Ranking includes degradates and contaminants
- 3B. Rank both aquatic life and human health ratios separately



- 4A. Obtain available monitoring data (DPR, CEDEN, literature)
  - assess based on EPA “bias factor approach,” for monitoring data assessment, comparing to reference value. Appropriate detection limits? Sampling timing? QA/QC?
- 4B. Obtain any relevant EPA & DPR modeling – does it predict reference value exceedances?
- 4C. Higher priority pesticide (303(d) list or has MCL)
- 4D. Are analytical methods available with relevant detection limits?
- 4E. Fate considerations [need to discuss whether/how to include]
- 4F. Crop-specific considerations [need to discuss whether/how to include]

