

SWAMP Region 1

2003 - 04

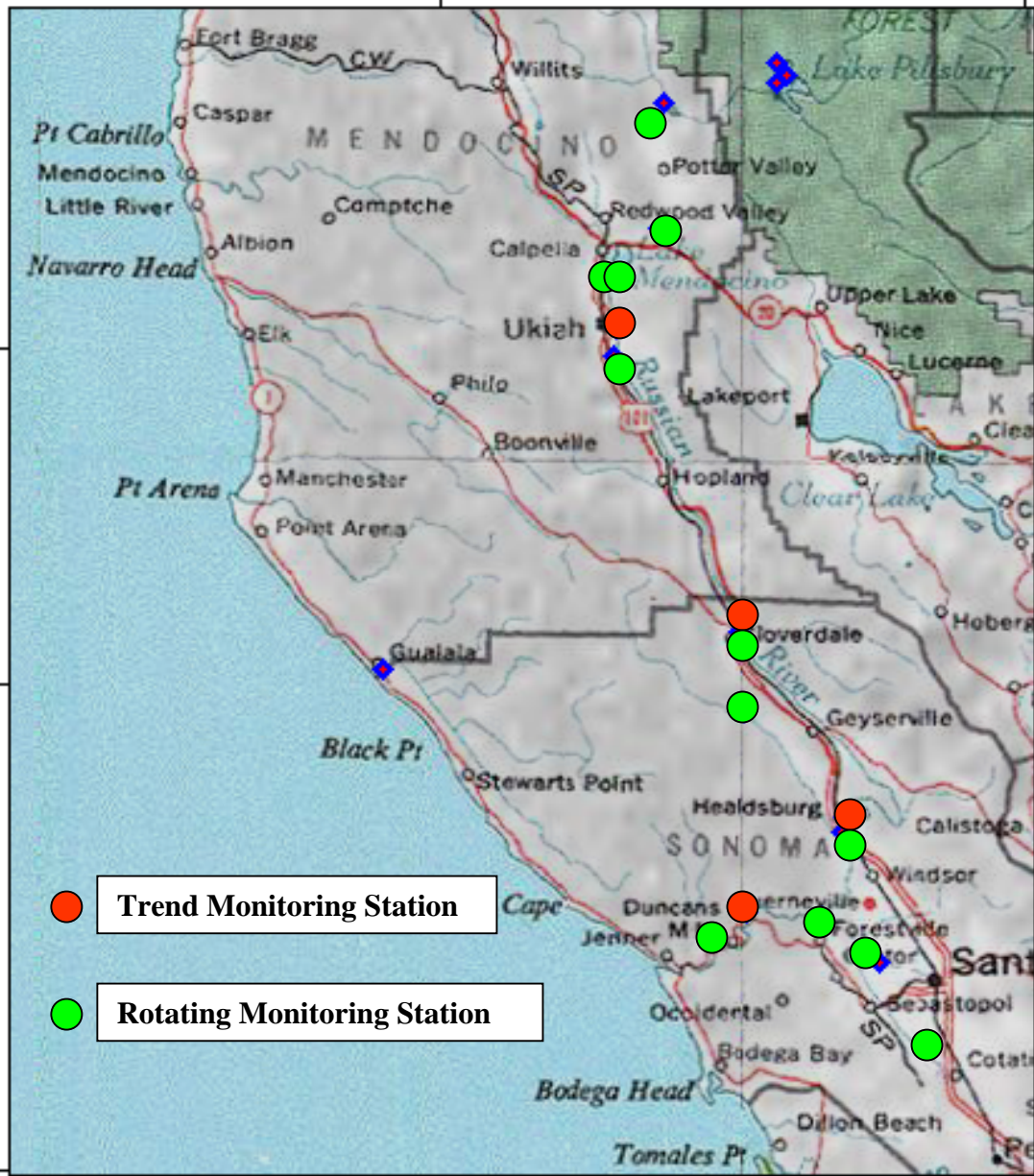


R-1 SWAMP in FY03-04 Watershed Assessment

- **Russian River Watershed Rotation**
- **Maintain four existing permanent stations on main stem**
- **Add thirteen rotating stations including:**
 - **Nine tributary stations**
 - **Four main stem stations**

123.43333° W WGS84 122.60000° W

39.11667° N
38.75000° N
38.21667° N



2004-05 Russian River Rotation:

4 Permanent trend monitoring stations in main stem augmented with 13 rotating stns:

Potter Valley - 2 stns

Dry Creek Valley - 2 stns

Laguna de Santa Rosa – 3 stns

Main stem:

East Fork

West Fork

Ukiah ds Talmage

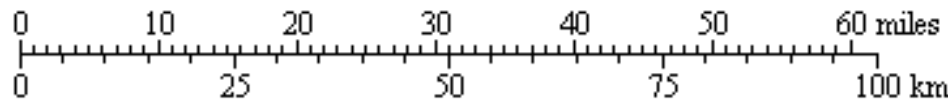
Big Sulfur Creek

Cloverdale STP

Austin Creek

39.11667° N
38.75000° N
38.21667° N

123.43333° W WGS84 122.60000° W



R-1 SWAMP in FY03-04

Other Activities

- **Continue to fund O &M for three Eel River stream gages**
- **Fund final phase of North Coast IBI study**
- **Continue EDC sampling and method development in collaboration with R-5, U. C. Davis Aquatic Toxicology Laboratory and U. S. EPA**

SWAMP DATA



Data Users

NCRWQCB – Planning (SCWA contract), TMDL (Shasta, Scott and Klamath Rivers), Core Reg (Russian River)

SCWA – Interbank Filtration Study with USGS

Karuk, Yurok and Hoopa Tribes

Inter Agency/InterTribal Klamath Fish Die-off Group

U. S. EPA, Region IX, Nutrient Criteria Development

National Park Service – Redwood National Park

Sotoyome Resource Conservation District

Shasta River Data Collection

- In support of TMDL development
- Physical parameters (DO, temp., SC, pH)
- Nutrient suites (N, P) and related parameters
- Temperature
- Riparian conditions
- Aquatic plant communities
- Substrate
- Sediment Oxygen Demand (SOD)

Klamath River Data Collection

- **In support of TMDL development**
- **Integrated with SWAMP program**
- **Physical parameters**
- **Nutrient suites and related parameters**
- **Aquatic plant communities**
- **Estuary bathymetry and water quality profiles**
- **Reservoir profiles**
- **Temperature**

Lost River Data Collection

- **In support of TMDL development**
- **Supported by SWAMP program staff**
- **Physical parameters**
- **Flow and channel geometry**
- **Nutrient suites and related parameters**
- **Aquatic plant communities**

Elk River Data Collection

- **In support of TMDL development**
- **Cooperative and regulatory landowner monitoring**
- **Instream Parameters: V^* , McNeil Bulk Sediment, Pebble Counts, Turbidity, Suspended Sediment Concentration, Stream Flow, Cross-Sections**
- **Sediment Source Assessment: Landslides, Roads, Streamside Sources**
- **Landslide Hazard Map Development**
- **Flooding Assessment**

North Coastal Streams Macroinvert Reference Site Study Update

- **Three large datasets: EMAP, US Forest Service, and CDFG combined**
- **North coast watershed boundaries delineated for 150 sites**
- **Quantitative criteria established to define candidate reference sites**
- **Identified 26 candidate sites (plus some alternates)**
- **30 Candidate sites sampled in August of 2003**
25 appear to be good reference sites

Next Phase

- **Combining datasets**
- **Screening for regionally specific metrics**
- **Multivariate ordination – Decide on single IBI or stratification by elevation, subecoregion or watershed area**
- **Repeat sampling study – true reach scale replication (side-by-side assessment at selected sites)**
- **Write the paper...**