Wetland Monitoring Strategy

Recommendations for the Wetland and Riparian Area Protection Policy

- Compiled from previous CWMW meetings.
- Consistent with WDP recommendations.
- Implementation topics added for discussion.
- Revised PPT will be provided to the Policy Development Team (PDT) and technical memorandum will follow.
  - Memo will be authored by SFEI/SCCWRP with attribution to CWMW unless CWMW takes ownership.

State Board policy can provide vision and general guidance on processes to achieve the vision

- State Water Board policy should reflect the needs of other State Agencies for wetland monitoring data.
- Detailed implementation strategy will follow from Policy but is not funded at this time.
- Policy is focused on wetlands now, but focus will expand to include riparian areas.
- CWMW is ongoing source of advice on applications of policy among State agencies.

DRAFT Monitoring and Assessment Vision Statement (Part 1 of 5)

The objective of this Policy is to protect the beneficial uses of California's wetlands and riparian areas. Monitoring and assessment is fundamental to achieving this objective. This Policy establishes the California Wetlands and Riparian Assessment and Monitoring Program (WRAMP) and directs the Regional Water Boards to implement WRAMP in coordination with other US National, California State, regional and local monitoring efforts.

.

DRAFT Monitoring and Assessment Vision Statement (Part 2 of 5)

WRAMP shall consist of coordinated, comparable regional and statewide efforts that commonly use standardized methods to monitor the effects of natural processes, climate change, and government policies, programs, and projects on the distribution, abundance, and condition of wetlands and riparian areas.

.

DRAFT Monitoring and Assessment Vision Statement (Part 3 of 5)

The WRMP will assess the individual and cumulative effects of local management actions, such as wetland and riparian mitigation, enhancement, restoration, and creation, on ambient conditions for a variety of spatial scales, such as watersheds, regions, and statewide.

DRAFT Monitoring and Assessment Vision Statement (Part 4 of 5)

The standardized methods will include definitions for wetlands and riparian areas, a system to classify them, mapping and delineation protocols, condition assessment protocols, data transfer protocols, data quality control procedures, analytical methods, and reporting methods. The WRAMP shall make wetland and riparian data available to the public through public information management systems.

DRAFT Monitoring and Assessment Vision Statement (Part 5 of 5)

The primary strategy for achieving this vision is to apply the standard methods through existing State programs and projects, rather than develop a new stand-alone program. This policy therefore directs the Regional Water Boards to collaborate with other State agencies and regional and local interests to develop the standardized practices and methods of the WRAMP.

Recommended Program Goal

Answer the fundamental questions about wetlands.

(Answers to these questions are needed to assess the performance of every wetland policy and program).

In one form or another, the fundamental questions are:

- *Where are the wetlands?*
- *What is their condition?*

Repeatedly answering these questions over time will assess net change in wetland quantity and quality. Other questions will follow.

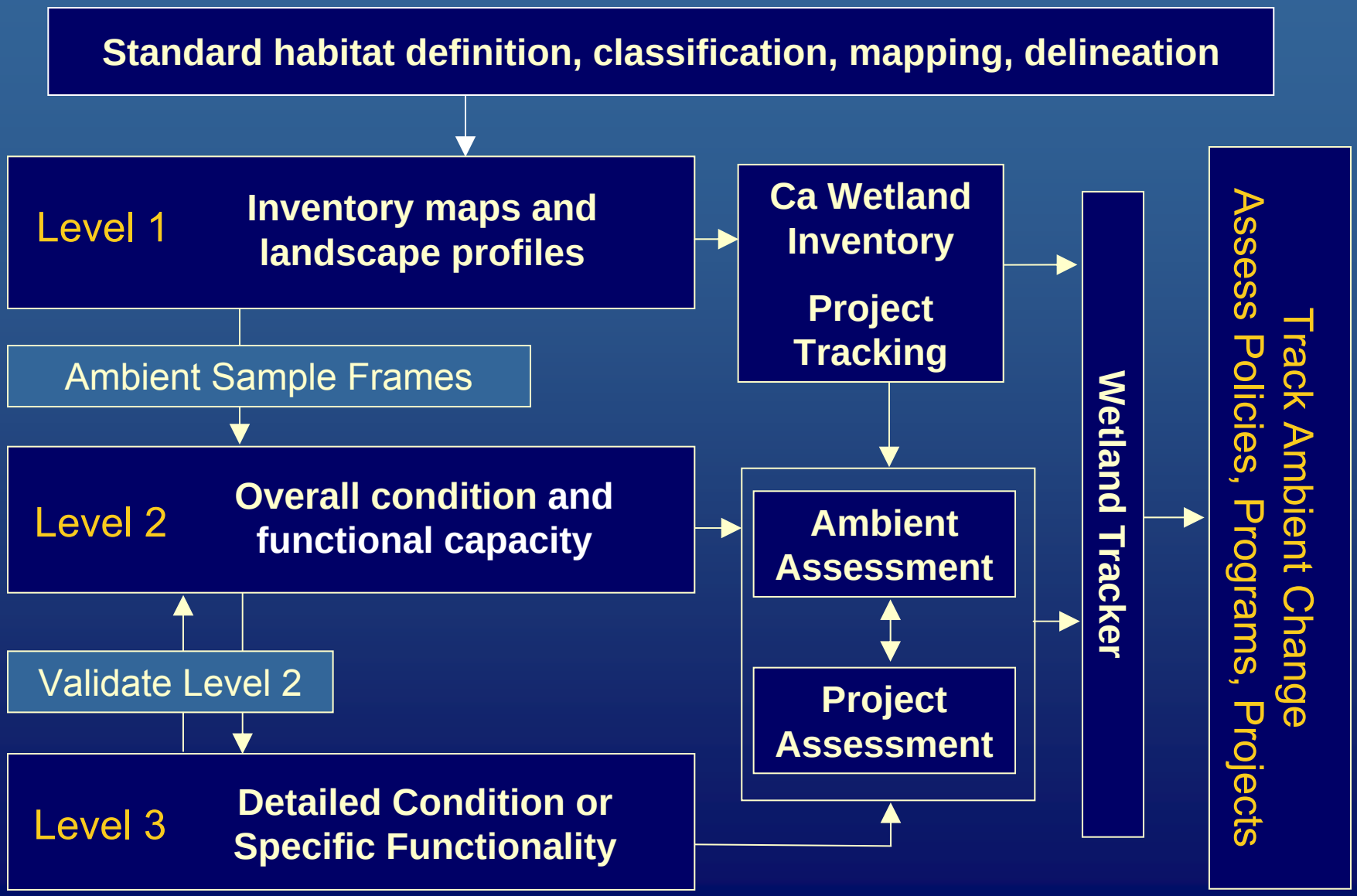
Same questions can be translated in terms of existing policies and programs

- *CWA 305b report: what are status and trends of wetlands as surface waters of the State?*
- *Governor's Executive Order W-59-93: what is the net change in the quantity and quality of wetlands?*
- *401/WDR: are wetland projects protecting the beneficial uses of State waters?*
- *FGC sec. 1600: are agreements protecting aquatic resources?*

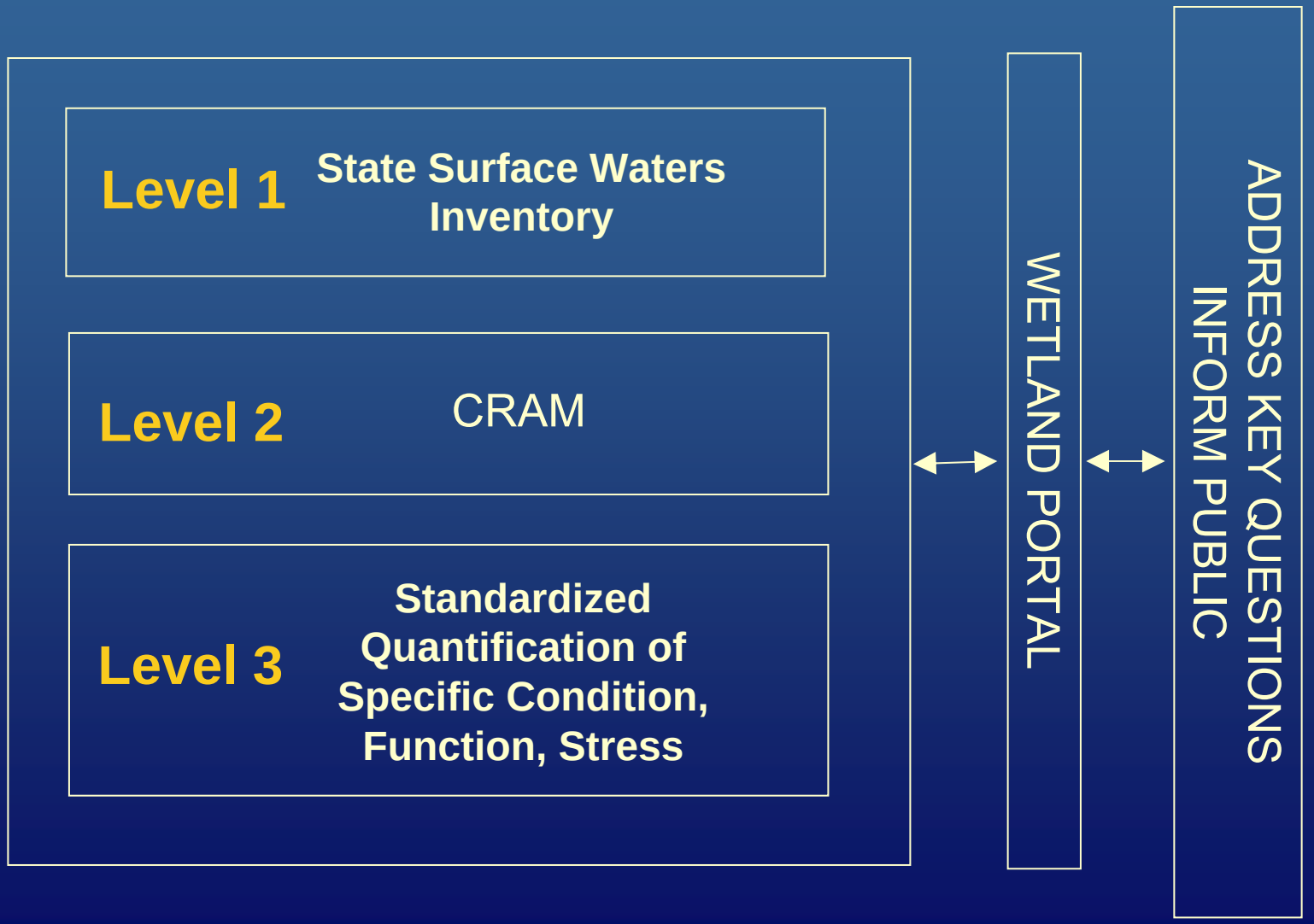
Recommended Program Objectives

- Track ambient wetland extent and condition based on probabilistic survey designs.
- Track projects affecting wetland extent and condition.
- Assess performance of wetland policies, programs, and projects.
- Increase public access to wetland data and information.

Recommended Technical Framework



Recommended Technical Framework
Basic Version



Level 1 Particulars

- Create Wetland and Riparian Area Inventory as part of an Inventory of State Waters and Aquatic Resources.
- Develop standardized definitions, classification systems, mapping methods, and delineation methods for:
  - Watershed Boundaries
  - Deepwater Areas
  - Wetlands
  - Channels
  - Riparian Areas
  - Aquatic Support Areas
- Apply Level 1 standards to projects as well as non-project areas.

Level 1 Particulars

- Link Level 1 mapping of State Waters and Aquatic Resources to CDFG Vegetation Classification and Mapping Program and to the California Interagency Watershed Mapping Committee (IWMC).
  - All Level 1 mapping should be managed by CDFG.
  - All Level 1 methods should be subject to State peer review with input from effected State agencies. State Water Board should lead peer review.
- Establish and maintain a Statewide committee of the CWMW to guide development and use of all Level 1 tools. CDFG should lead the Level 1 Committee.

Level 2 Particulars

- Each module of CRAM should be subject to peer review as defined by the State Board.
- Maintain eco-regional networks of CRAM reference sites. For this purpose, eco-regions should be defined by CDFG.
- Establish and maintain a Statewide committee of the CWMW to guide development and use of CRAM. State Water Board should lead the CRAM Committee.

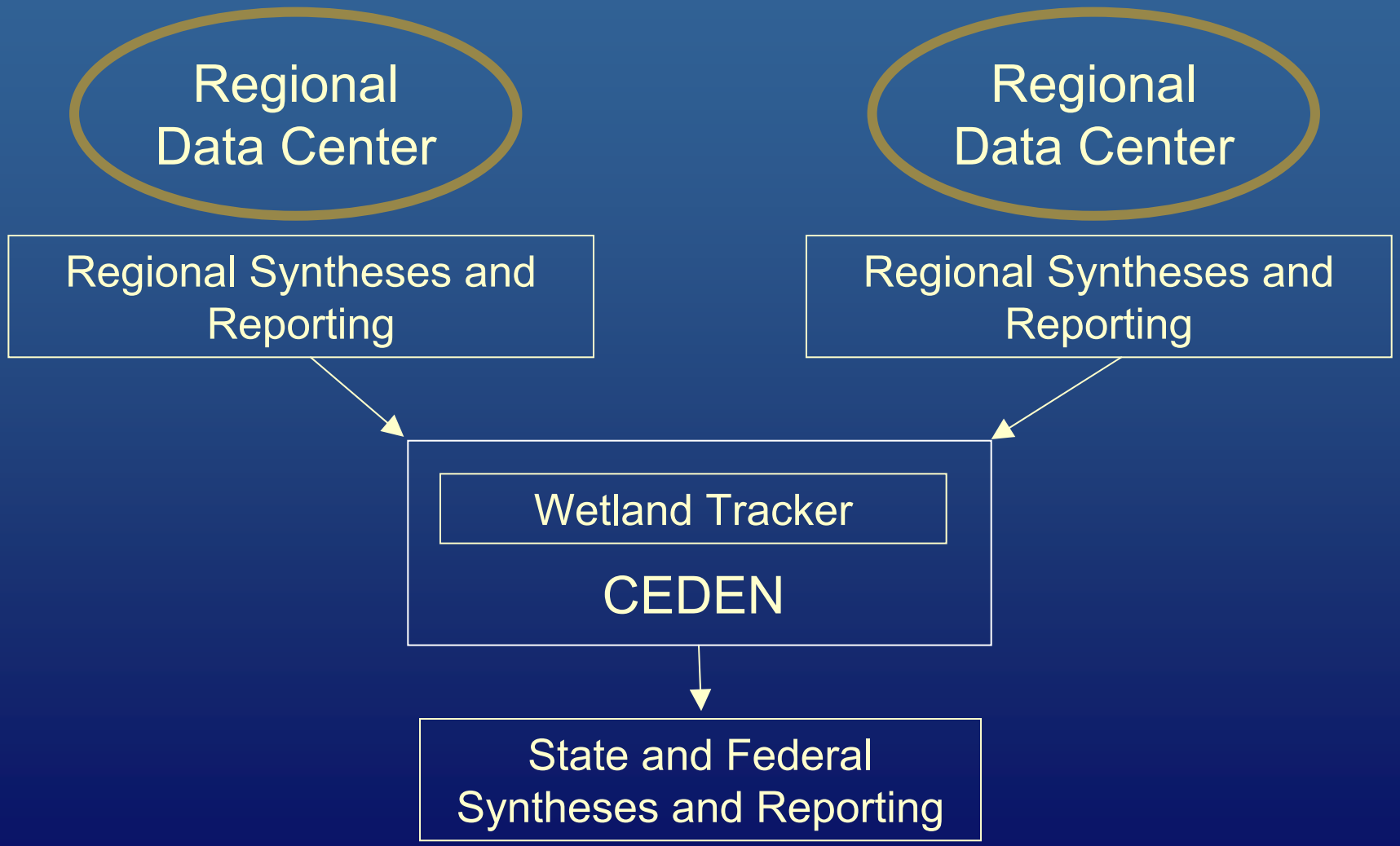
Level 3 Particulars

- CWMW should develop and implement a process to prioritize and guide Level 3 tool development.
- Each Level 3 tool should be subject to peer review as defined by the State Water Board.
- Maintain eco-regional networks of Level 3 reference sites. For this purpose, eco-regions should be defined by CDFG. To the extent possible, use Level 2 networks for Level 3.

Data and Information Management

- Develop Regional Data Centers (RDCs) as defined by the State Water Board. In this regard, Regional Water Boards or groups of them comprise regions.
- Develop the Wetland Tracker Information System (WT) as Statewide “Wetland Portal”.
  - Add Sec.1600 permits, CEQA projects, WDR’s, and Individual Agricultural Waivers to the WT.
  - Develop WT for online permit applications, permit tracking, monitoring data entry, data management, data access, automated reporting, user-defined data queries, and data visualization.

Inter-regional Coordination



QAQC

- All standard methods should be sanctioned by SWAMP.
- For each Level 1-3 tool or methodology, QAQC consists of the following:
  - Standardized practitioner training and tracking
  - Calibration among users
  - Data audits
  - Assessment audits.

Organizational Concepts

- Statewide program depends on coordinated adoption of standardized Level 1-3 practices and methods plus information management by all State agencies responsible for wetland protection and management.
- Statewide program consists of regional programs coordinated with statewide data collection efforts.
- All methods should be sanctioned by SWAMP.

Organizational Concepts

- Regional Programs are housed at organizations with adequate computing and data management capability, financial development capability, and government oversight, such as NGOs with JPA status and state academic institutions.
- Regional Programs administer RCDs, QAQC procedures, and regional ambient assessments.
- CWMW is the primary coordinating entity among regional programs and Statewide programs.

Implementation

- Project monitoring should be conducted by project sponsors or their partners or contractors as part of project costs. Policy should require projects to use standardized Level 1-3 tools as a condition of permits.
- Ambient surveys are periodically conducted by state agencies with regional and local partnerships. CDFG is likely to lead statewide ambient surveys, and regional programs are likely to lead regional surveys.

Implementation

- Significant costs not specific to individual projects include ambient surveys, database and portal development and maintenance, QAQC programs, and CWMW support.
- Possible sources of funds for these ongoing regional costs include State allocations, en-lieu fees, SEPs, and permit fees. Also, regional programs should have capability to develop grant and contract monies with federal agencies, local agencies, foundations, and private sector.

Who Does What

- State Water Board
  - Issues policy establishing the WRAMP.
  - Co-leads CWMW.
  - Leads development of Level 2 methods and application guidance (chairs Level 2 committee of CWMW).
  - Participates (may lead) Level 3 method development and application guidance.
  - Coordinates state peer review and SWAMP sanctions of Level 1-2-3 methods.
  - Leads RDC planning and development.

Who Does What

- CDFG
  - Co-leads CWMW.
  - Leads development and maintains Level 1 methods and products (chairs Level 1 committee of CWMW).
  - Participates (may lead) Level 3 method development and application guidance.
  - Coordinates Natural Resources Agency input to state peer review of Level 1-2-3 methods.
  - Implements Level 1-2-3 methods through 1600 program and other CDFG programs.

Who Does What

- Regional Water Boards
  - Implement Policy within Regions.
  - Participate on CWMW.
  - Chair or Co-chair regional WRAMP programs.

Who Does What

- Federal Agency (USACE, USEPA, NRCS)
  - Co-chairs CWMW.
- CWMW
  - See CWMW Charter.