

Recycled Water Policy

Salt and Nutrient Management Plan Elements

Introduction and Stakeholder Kickoff Meeting

March 3 & 10, 2010

Recycled Water Policy

- Basin/sub-basin monitoring plan
- Constituents of emerging concern monitoring
- Water recycling and stormwater recharge/reuse goals & objectives
- Salt and nutrient source identification
- Assimilative capacity and loading estimates
- Fate and transport analysis
- Implementation measures
- Antidegradation analysis (Resolution 68-16)

Expanded Element Categories

- Background
- Groundwater Basin Description/
Environmental Setting
- Source Analysis
- Regional Monitoring Plan
- Goals and Objectives
- Implementation

Background

- Recycled water policy overview
- Existing related plans and projects
 - IRWMs, GMPs – AB3030, etc.
- Regulatory setting
 - 303(d) listings, TMDLs, WDRs, local controls/ordinances, etc.
- Stakeholder list, roles and responsibilities

Groundwater Basin Description/ Environmental Setting

- Climate
- Geology
- Hydrogeology/hydrology
- Landcover and landuse evaluation/mapping
- Existing/background groundwater and surface water quality and quantity conditions
- Beneficial uses
- Recharge area identification/mapping/ranking

Source Analysis

- Conceptual model
- Fate and transport analysis
- Water balance
- Salt and nutrient balance
 - source identification
 - loading/concentration analysis
- Assimilative capacity analysis

Regional Monitoring Plan

- Water balance tracking/monitoring
- Salt and nutrient balance and source loading monitoring
- Constituents of Emerging Concern (CEC) monitoring
- Trend analyses
- Data management and reporting (GAMA GeoTracker)
- Implementation schedule

Goals and Objectives

Quantitative

- Water Quality Objectives (WQO)
- Sustainable salt/water balance plan(s)
- Load allocations
- Load reduction goals
- Water conservation goals
- Water recycling goals
- Storm water retention/recharge goals

Goals and Objectives

Qualitative

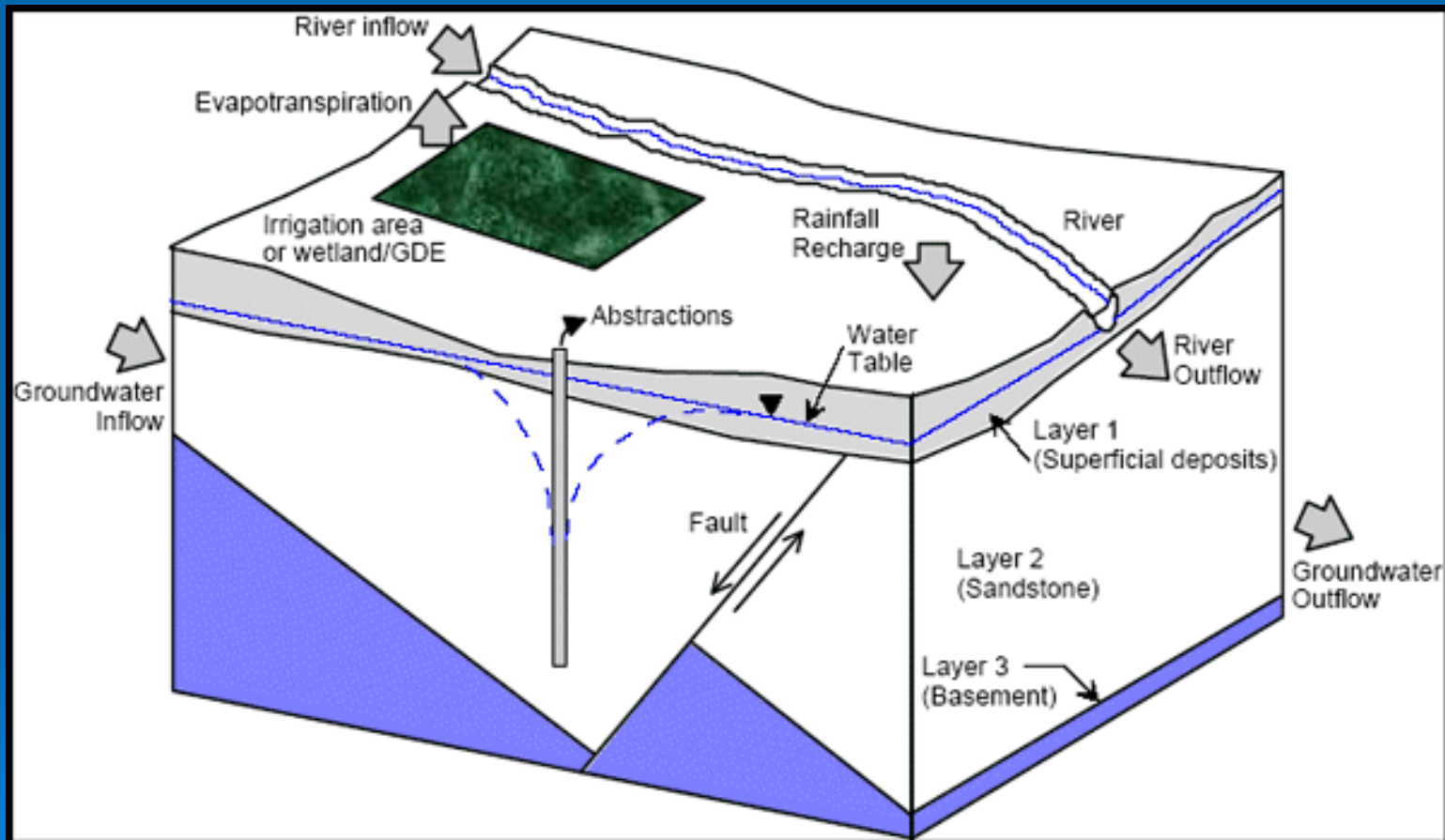
- Beneficial use protection/restoration
- Institutional controls, landuse planning (general plan amendments), local ordinances, etc.
- Management practices
- Recharge area protection/restoration
- Wellhead protection

Implementation

- Implementation plan (QAPP x 2?) and schedule
- Performance measures (quantitative and qualitative)
- Adaptive Management Plan

- Public outreach and education
- Cost analysis and funding opportunities
- Antidegradation analysis
- CEQA
- Organizational structure
- Institutional agreements

Conceptual Model



Quality Assurance Project Plan (QAPP):

A Quality Assurance Project Plan documents the planning, implementation, and assessment procedures for a particular project, as well as any specific quality assurance and quality control activities. See following EPA website for more information:

<http://www.epa.gov/QUALITY/qapps.html>

Adaptive Management

Typical steps in the process of Adaptive Management could include:

START: Clarify organization or project mission

STEP A: Design a conceptual model based on known conditions

STEP B: Develop a management plan: goals, objectives, and activities

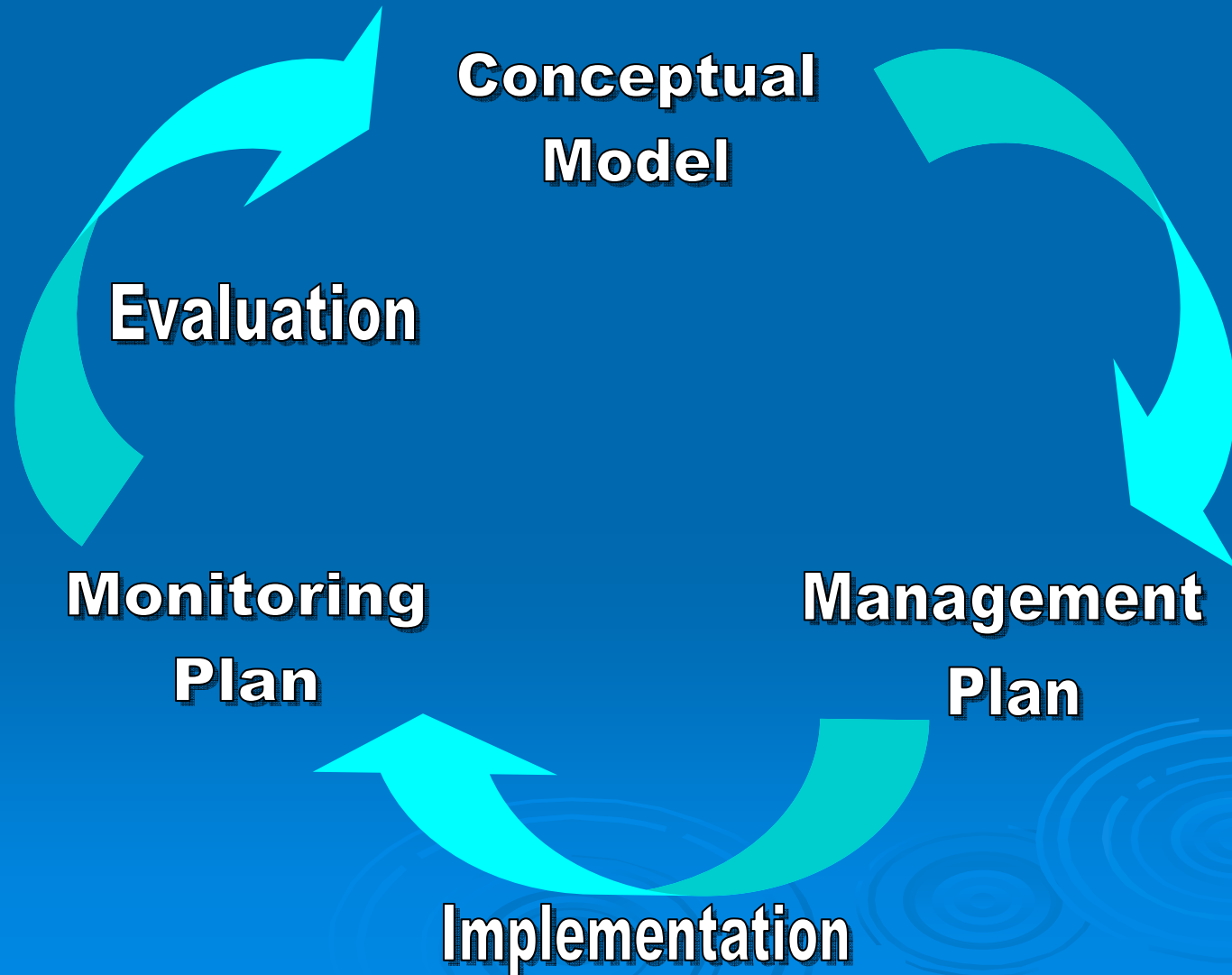
STEP C: Develop a monitoring plan

STEP D: Implement management and monitoring plans

STEP E: Analyze data and communicate results

ITERATE: Use results to adapt and learn

Adaptive Management



Antidegradation Policy

Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.