SOURCE WATER PROTECTION AT THE WATER BOARDS

REQUIREMENTS, CURRENT PROJECTS, FUTURE PLANNING
Safe Drinking Water Act outlines SWP requirements
- DWSAP (DHS 1999)
- 92% of assessments completed (2003)

Transfer of Drinking Water Program to Water Board
- Transition Plan- GAMA Program coordinates implementation
- Contract with UC Davis ICE expired

Two-day workshop to explore SWP actions at Water Boards
- Current efforts supporting SWP
- Recommended efforts to enhance SWP activities

SWP Workgroup frames Plan and Initiative doc
- Two-part plan

SOURCE WATER PROTECTION
BACKGROUND
SOURCE WATER PROTECTION NEEDS

SDWA Requirements

EPA Annual Inquiries

Current and Future Initiatives

DATA
The SWP Data Hub

- Centralize ground and surface water data to assess vulnerability of drinking water sources to contaminants
- Provide data and location for assessment tool
- Allow public accessibility and data downloads
- Provide proximity search tools
- Does not reflect delivered, treated drinking water
SOURCE WATER PROTECTION
EXAMPLE INFORMATION TO BE PROVIDED IN DATA HUB

Informational Data
- Public Water Sources (wells, surface water intakes)
- Protected Areas (Federal, State, Tribal, etc.)
- Water Quality Information
- Soil Properties (SSURGO)
- Land Cover (NLCD)

Program Designations
- Existing SWAs and Plans
- IRWMs
- TMDLs
- 319 (h) Grant Projects
- Aquifer Exemptions

Contaminants
- Railroads, Roads, Hazardous Materials Routes
- Clean-Up Wells (wells under Water Board authority)
- Impaired Waters (303(d))
- Potentially Contaminating Activities (animals, landfills, etc.)
- Facilities Permitted to Discharge to Water (NPDES)
A capture zone is calculated to determine various travel time scenarios for potential sources of contamination.

Workgroup of DDW staff in progress to develop parameters of assessment tool.

EPA tools may be used to delineate most accurate zones (hydrologic conductivity, pump rate, soils).

Wellhead Analytic Element Model (WhAEM).

In systems with lack of hydrogeological data, a more conservative, calculated fixed-radius is determined.
SAFE TO DRINK PORTAL
WATER QUALITY MONITORING COUNCIL-
MY WATER QUALITY PORTAL

- mywaterquality.ca.gov/safe_to_drink
- Provides information about:
  - Quality of drinking water
  - Regulating agencies that oversee public water systems
  - Private wells
# SOURCE WATER PROTECTION PRODUCTS & BENEFITS

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SOURCE WATER PROTECTION
PLAN COMPONENTS

Data Integration
(Data Hub, Assessment Tool) + Program Coordination
(Initiative Efforts) = Source Water Protection Plan
SOURCE WATER PROTECTION
ADVANTAGES TO WATER BOARDS

- Update and Improve Assessments
- Attribute data previously not electronic
- Simultaneously research all SWP data spatially
- Facilitate program coordination
- Strengthens SWP for all Water Boards’ programs
SOURCE WATER PROTECTION: A PREVENTATIVE APPROACH

- Raw ground and surface waters
- Flags all potentially contaminating activities to source
- Central data hub
- Assessment Tool resource for water systems
- Previous Source Water Assessments
- U.S. Safe Drinking Water Act – prevent pollution

Characterizes contamination potential
SOURCE WATER PROTECTION
PROJECT MILESTONES

Construct Data Hub
- Gather Data
- Attribute/Digitize
- Import
- Design

Develop Assessment Tool
- DDW Workgroup: Tool Parameters
- Parameters to DIT: June 2019
- Test Site

Initiatives/Plan Development
- RB Workgroup Development
- Draft Plan: June 2019
- Data Site White Paper: Dec 2019

Final Site
- Site Testing: Jan 2020
- Board Info Item: Spring 2020
- Release Online

December 2019
SOURCE WATER PROTECTION
PROJECT CONTACTS

Carolyn Cantwell
• Phone: (916) 341-5413
• Email: Carolyn.Cantwell@waterboards.ca.gov

Dori Bellan
• Phone: (916) 341-5502
• Email: Dorian.Bellan@waterboards.ca.gov