

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

SANTA MARGARITA GROUNDWATER BASIN MANAGEMENT

SCOTTS VALLEY CITY COUNCIL MEETING

APRIL 5, 2017

CITY OF SCOTTS VALLEY ROLE

Ensure land use and water use are in alignment with long term basin sustainability without overdraft or other undesirable effects.

- Appoint a member to the board of Santa Margarita Groundwater Agency
- Participate in developing Groundwater Sustainability Plan (GSP)
- Ensure conformance of the General Plan with GSP



SANTA MARGARITA GROUNDWATER BASIN (SMGWB) MANAGEMENT

TOPICS:

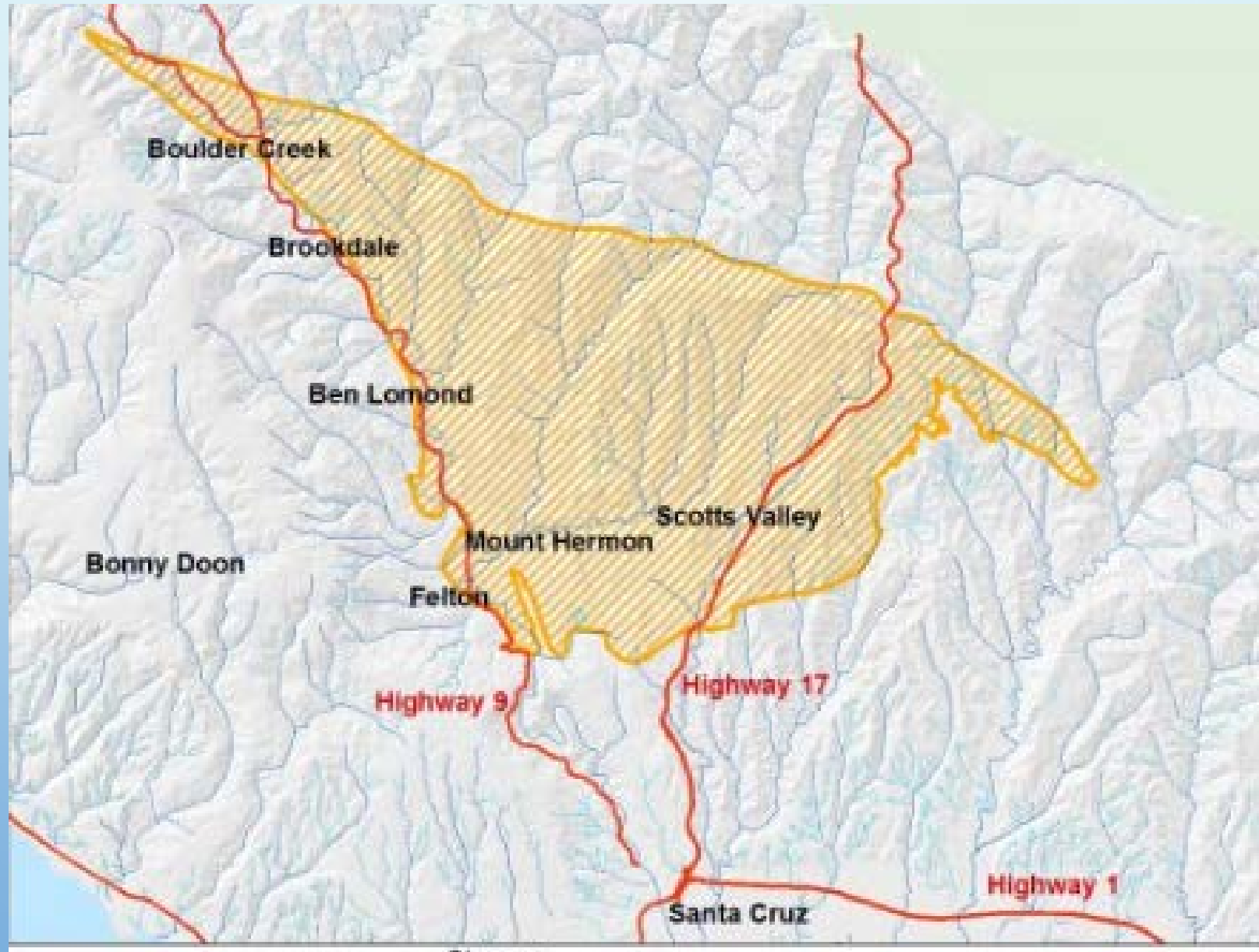
- Basin Geology and Water Use
 - History of Management
 - Sustainable Groundwater Management Act (SGMA)
 - Role of the City of Scotts Valley
- 

SANTA CRUZ COUNTY GROUNDWATER BASINS



SANTA MARGARITA GWB

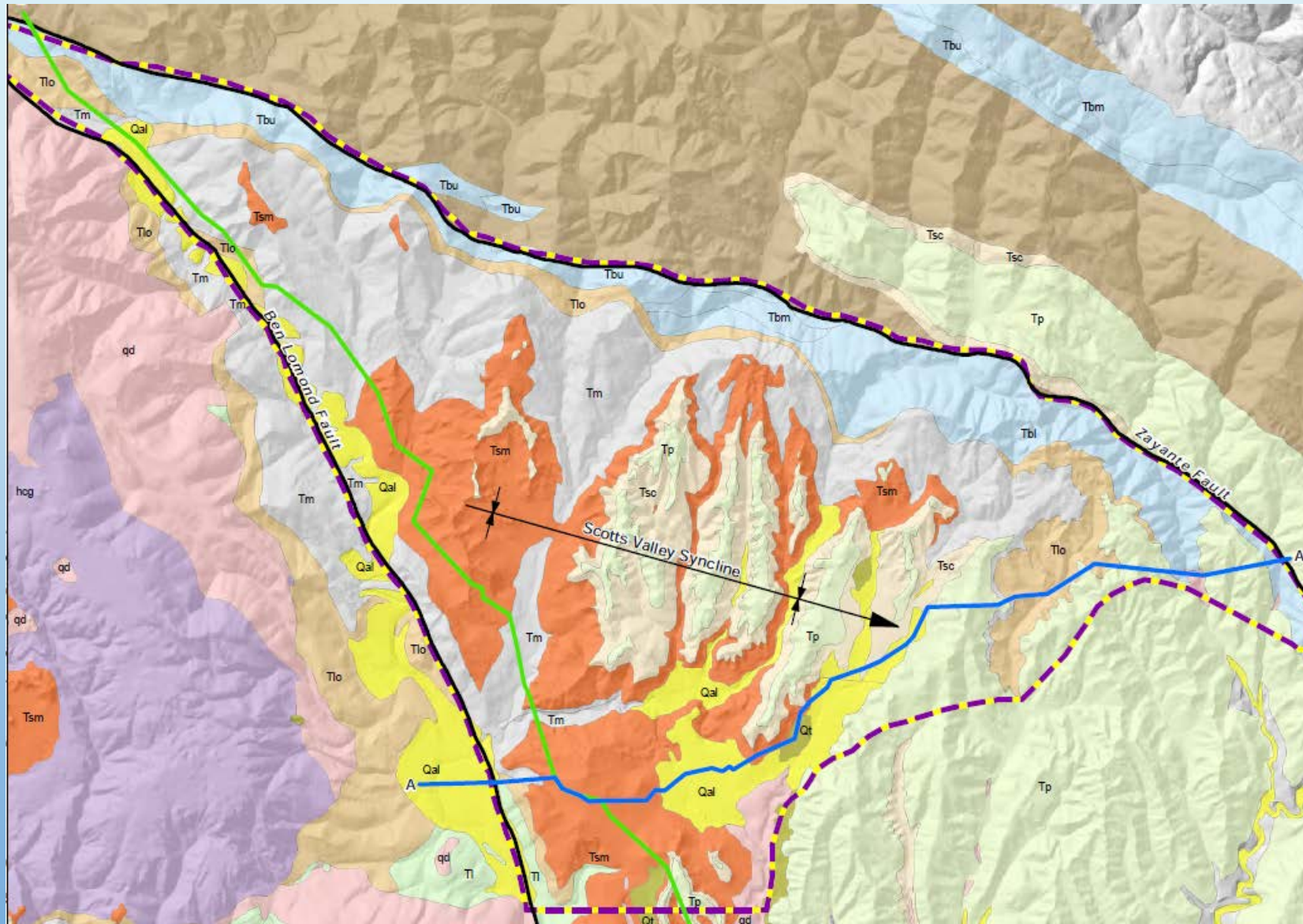
SMGWB BOUNDARIES



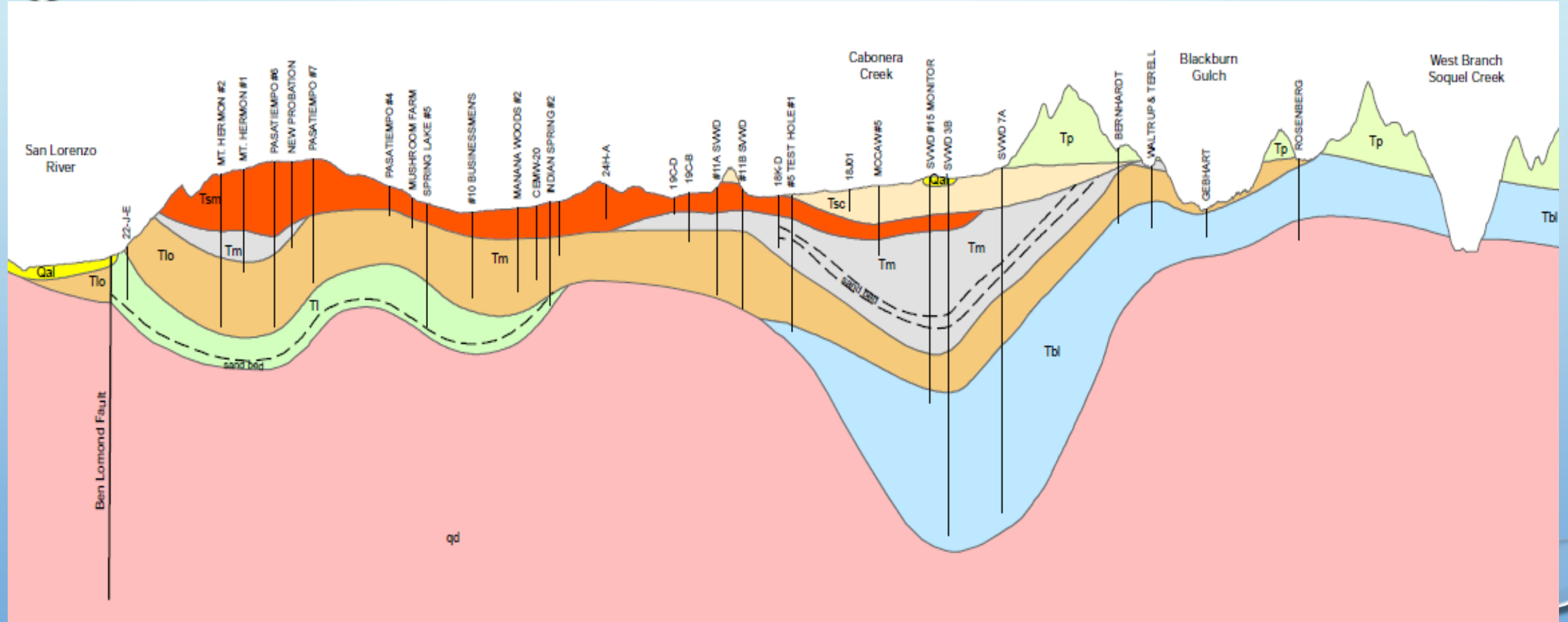
SMGWB SIGNIFICANCE

- Covers an area of 33 square miles.
- Is a primary source of water supply for Scotts Valley, Santa Cruz and the San Lorenzo Valley
- Contributes 40% of dry season flow in the San Lorenzo River
- Has been significantly impacted by over-pumping and lost recharge from urbanization.
- Has great potential for improved management under the Sustainable Groundwater Management Act for more reliable water supply and increased summer stream flows.

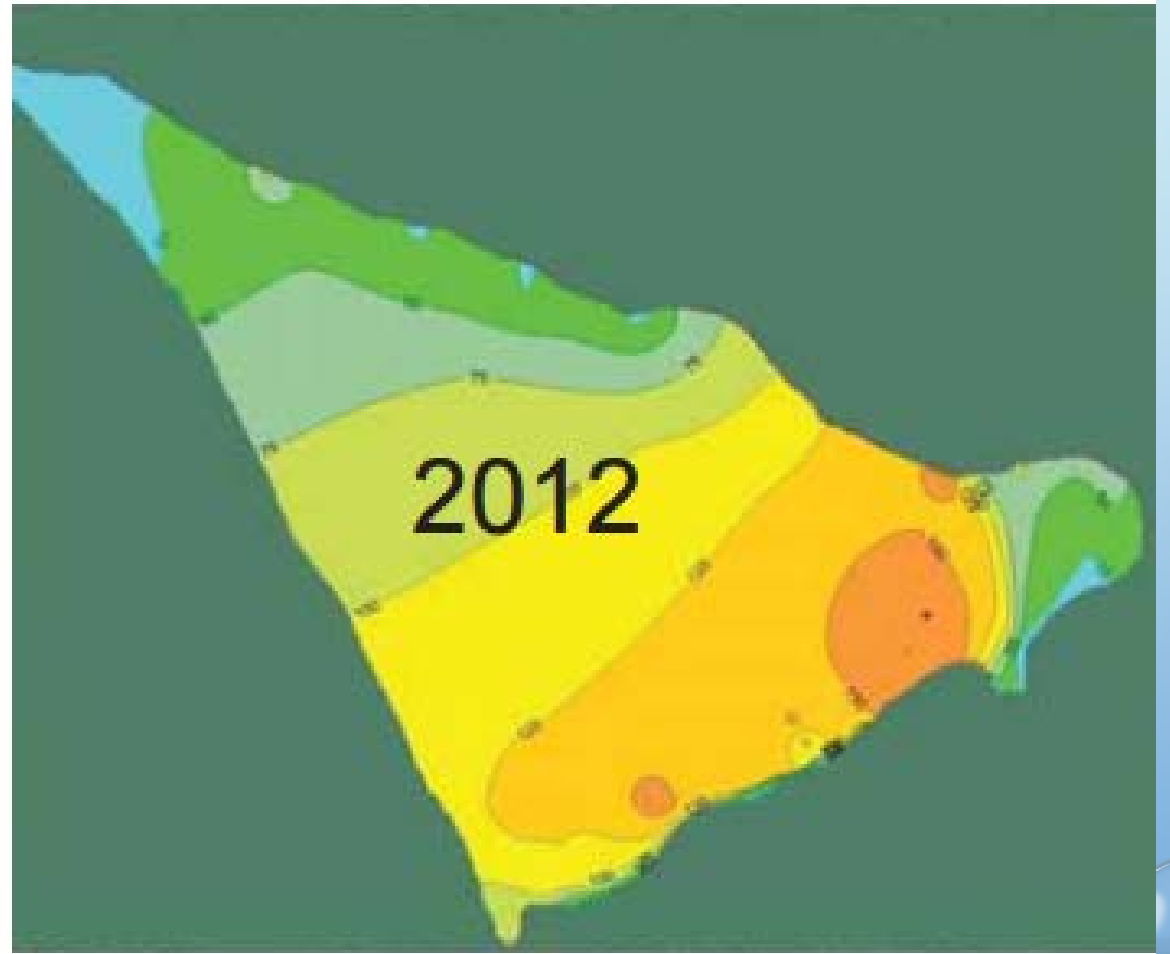
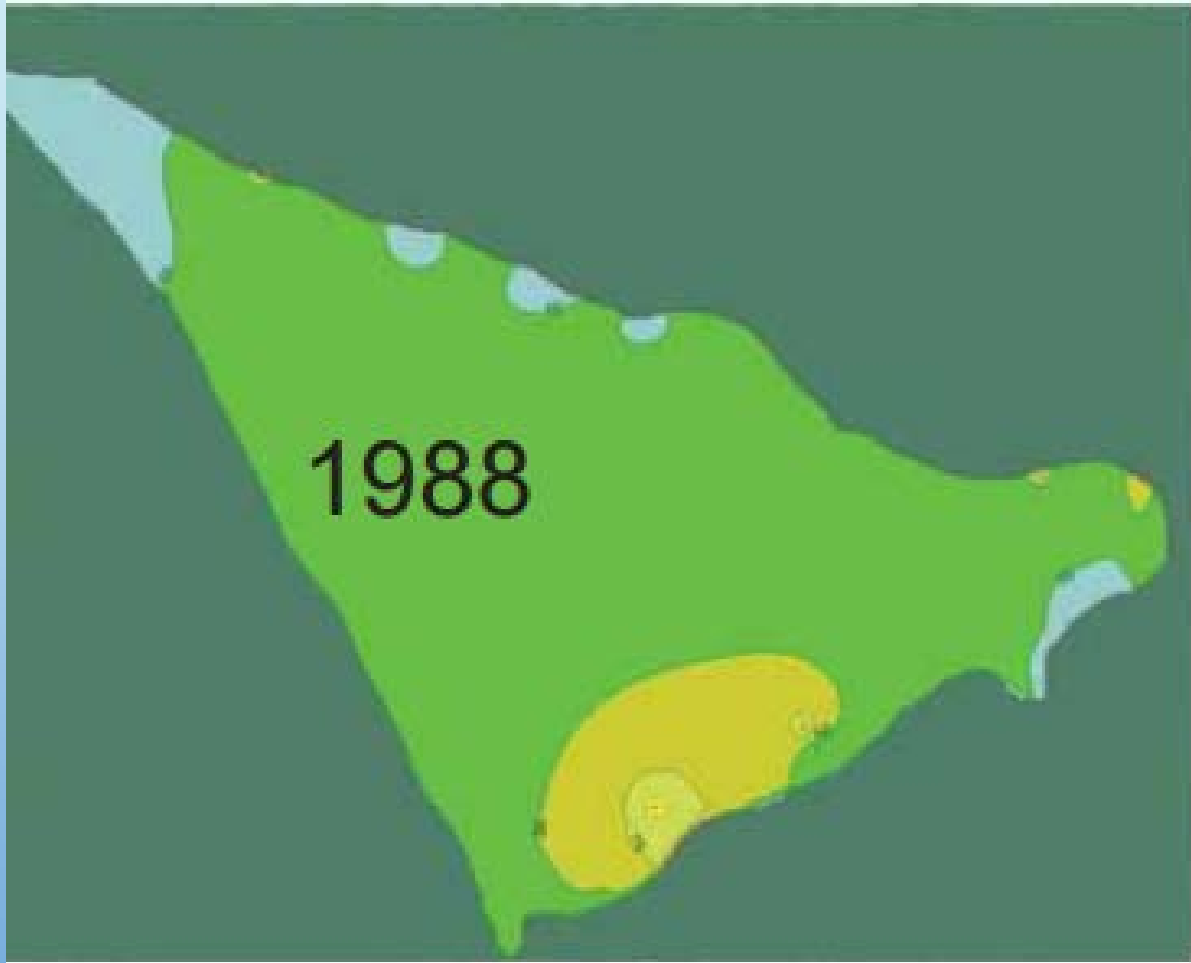
SMGWB GEOLOGY



BASIN CROSS SECTION WEST TO EAST



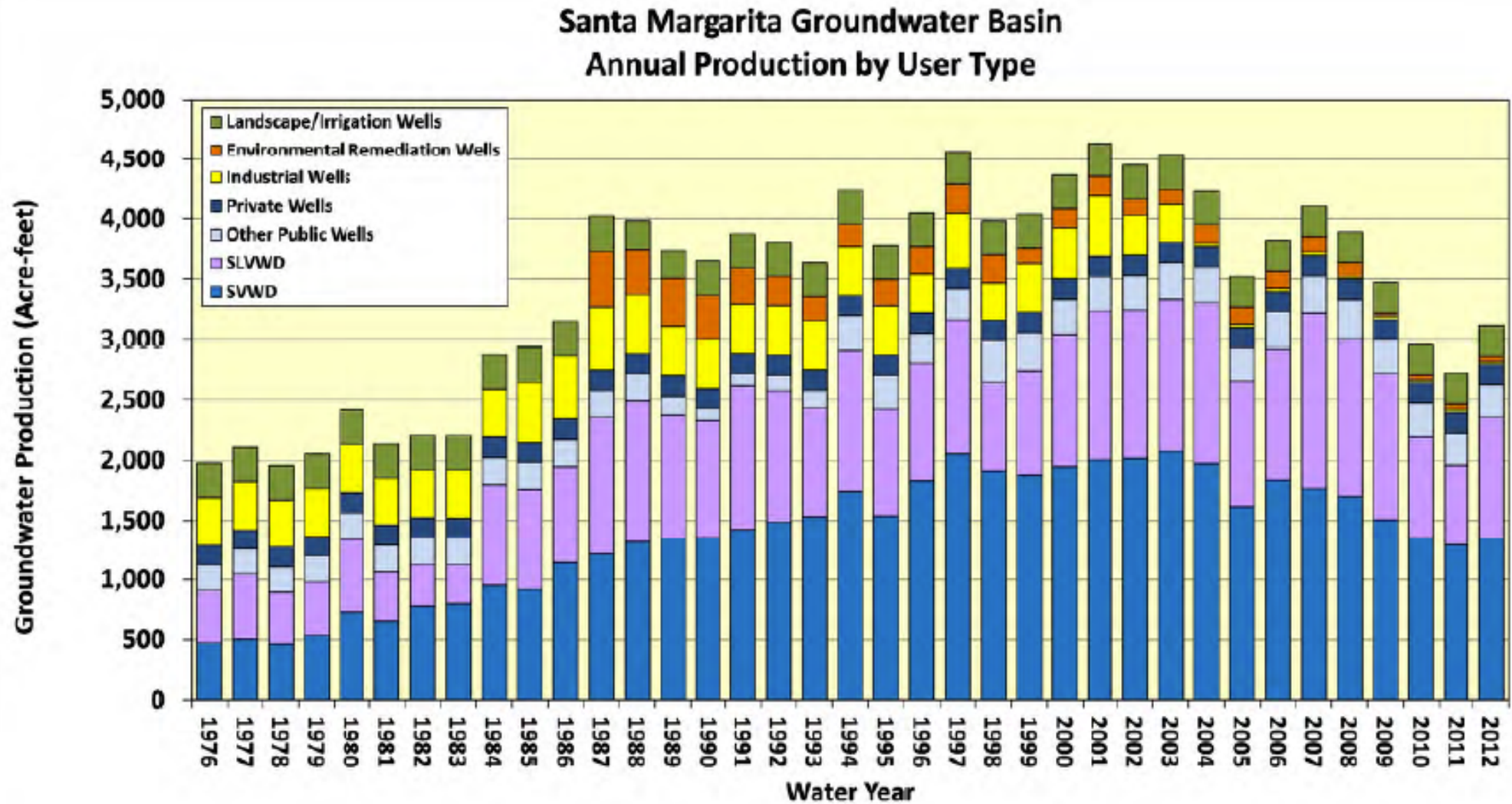
BASIN OVERDRAFT (LOMPICO AQUIFER)



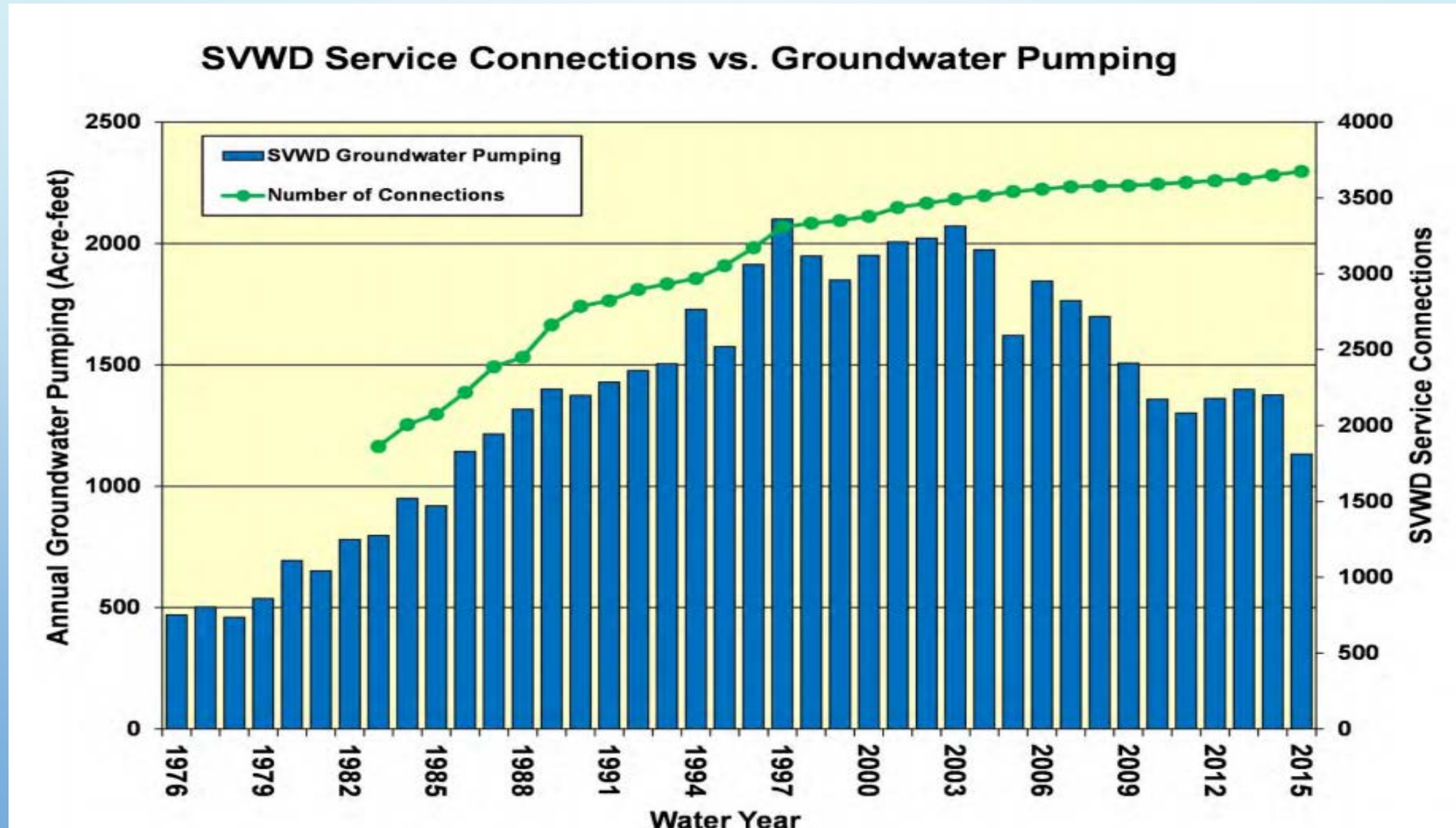
GROUNDWATER USE 2014

	2014 Use Acre-feet	
Scotts Valley WD (all groundwater)	1,218	42%
San Lorenzo Valley WD (surface and ground)	1,173	40%
Mount Hermon Association (all ground)	138	5%
Small Water Systems (12)	~80	3%
Commercial, Industrial and Ag Users	~100	3%
Private Residential Wells (1,100)	~220	8%
Base Streamflow: Fish and City of Santa Cruz	~6,000	
City of Santa Cruz	~2,500	

GROUNDWATER PRODUCTION 1976-2012



SCOTTS VALLEY WD PUMPING 1976-2015



SMGWB CONDITIONS

- Combined annual pumping has decreased 45% since 1997
- Demand and supply in the basin have been in balance since 2005
- Basin has stabilized, but at lower than historical levels
- Groundwater declines of up to 250 FT
- Cumulative loss of supply of ~25,000 AF (equal to 8 yrs of current pumping)
- Summer flow in lower Bean Creek reduced by 10-20%
- Loss of recharge from urbanization estimated at 20%, 1,900 acre-feet/year
- Future threat of climate change: 30% reduced recharge, increased demands

MANAGEMENT HISTORY

- Active groundwater management in the basin has occurred since early 1980s
- 1983 – SVWD instituted a Water Resources Management Plan to monitor and manage water resources
- 1994 – SVWD formally adopted a Groundwater Management Plan in accordance with AB3030, also known as the Groundwater Management Act (Water Code Sec. 10750)
- 1995 – SVWD, SLVWD, MHA, Lompico County Water District, City of Scotts Valley and County of Santa Cruz signed a MOU forming Santa Margarita Groundwater Basin Advisory Committee (SMGBAC)
- SMGBAC has been actively involved in the cooperative groundwater management of the basin since then

SUSTAINABLE GROUNDWATER MANAGEMENT ACT (SGMA)

- Local agency or agencies must form a groundwater sustainability agency (GSA)
- GSA develops and implements a plan that will prevent undesirable results:
 - Chronic lowering of groundwater levels
 - Significant, unreasonable reductions in storage
 - Significant , unreasonable degradation of water quality
 - Significant, unreasonable depletion of surface water
- GSA may measure and limit extraction, impose management fees, enforce the terms of the groundwater sustainability plan.
- GSA and land use agencies must coordinate
- State oversight and action if locals fail to act

PROPOSED SANTA MARGARITA GROUNDWATER AGENCY (SMGA)

- Joint Powers Agreement (JPA) between SVWD, SLVWD, and County
- 11 member board including representatives of member agencies (6) and City of Scotts Valley (1), City of Santa Cruz (1), Mount Hermon Association (1) and private well owners (2)
- Much of JPA modelled after Mid-County Groundwater Agency
- SMGA replaces SMGWB Advisory Committee

NEXT STEPS

(*City Involvement)

- Adoption of JPA to form Santa Margarita Groundwater Agency (SMGA) by SVWD, SLVWD, County
- *Appointment of SGMA Board members, including private well owners
- Designation of SMGA as Groundwater Sustainability Agency
- *Development of Groundwater Sustainability Plan (GSP) by SMGA by 2022 ensuring consistency between GSP and local General Plans
 - Growth and water demand, recharge protection, etc.
- Ongoing involvement of community and stakeholders