

Sonoma Valley Stormwater Management and Groundwater Recharge Scoping Study

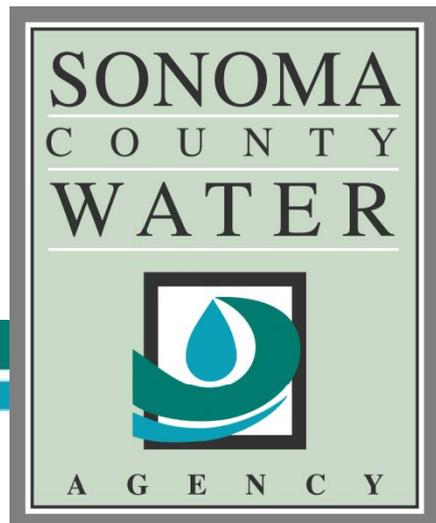
Issues and Objectives



Betty Andrews

Principal

bandrews@esassoc.com

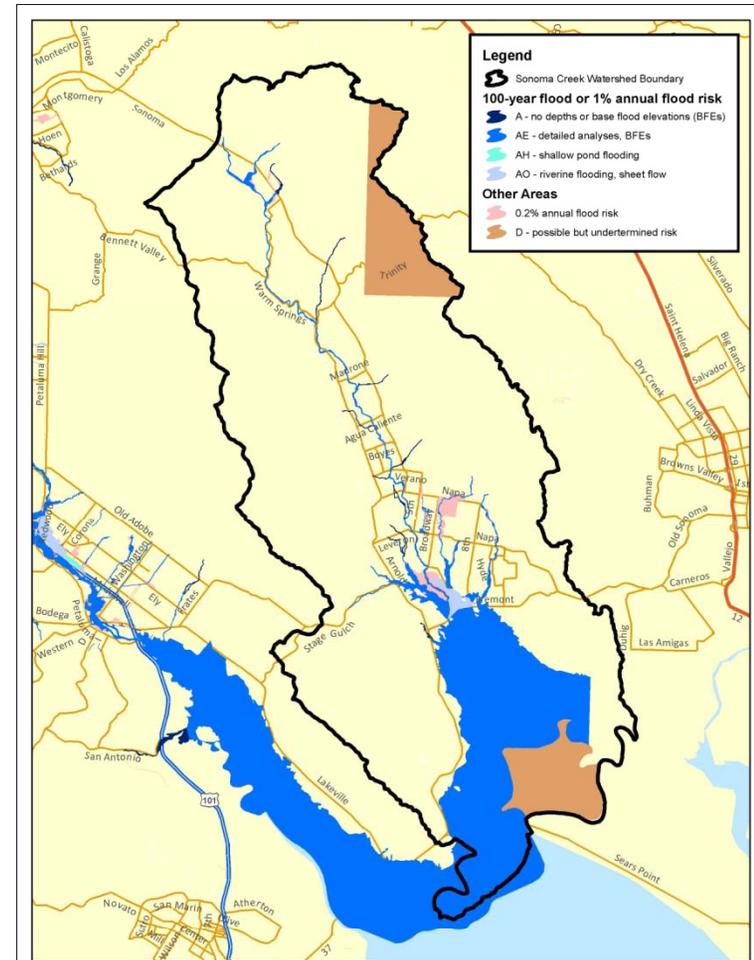


Core Project Objectives

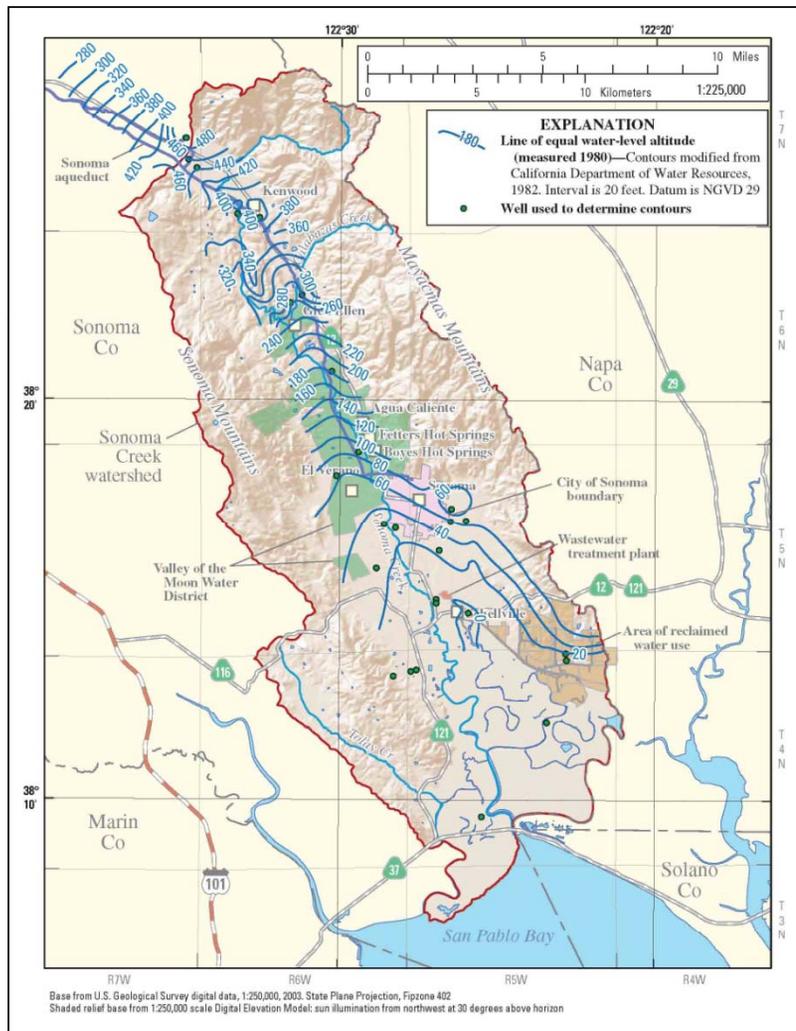
- Flood hazard reduction
 - Improve management of stormwater that contributes, directly or indirectly, to reduced flood hazards.
- Groundwater recharge
 - Increase beneficial recharge of groundwater, whether or not that recharged groundwater is directly accessible as water supply.

Issues: Flood hazards

- Large floods: reported damages & flood mapping center on Kenwood, Schellville, and Sonoma
- Flood effects may be much broader

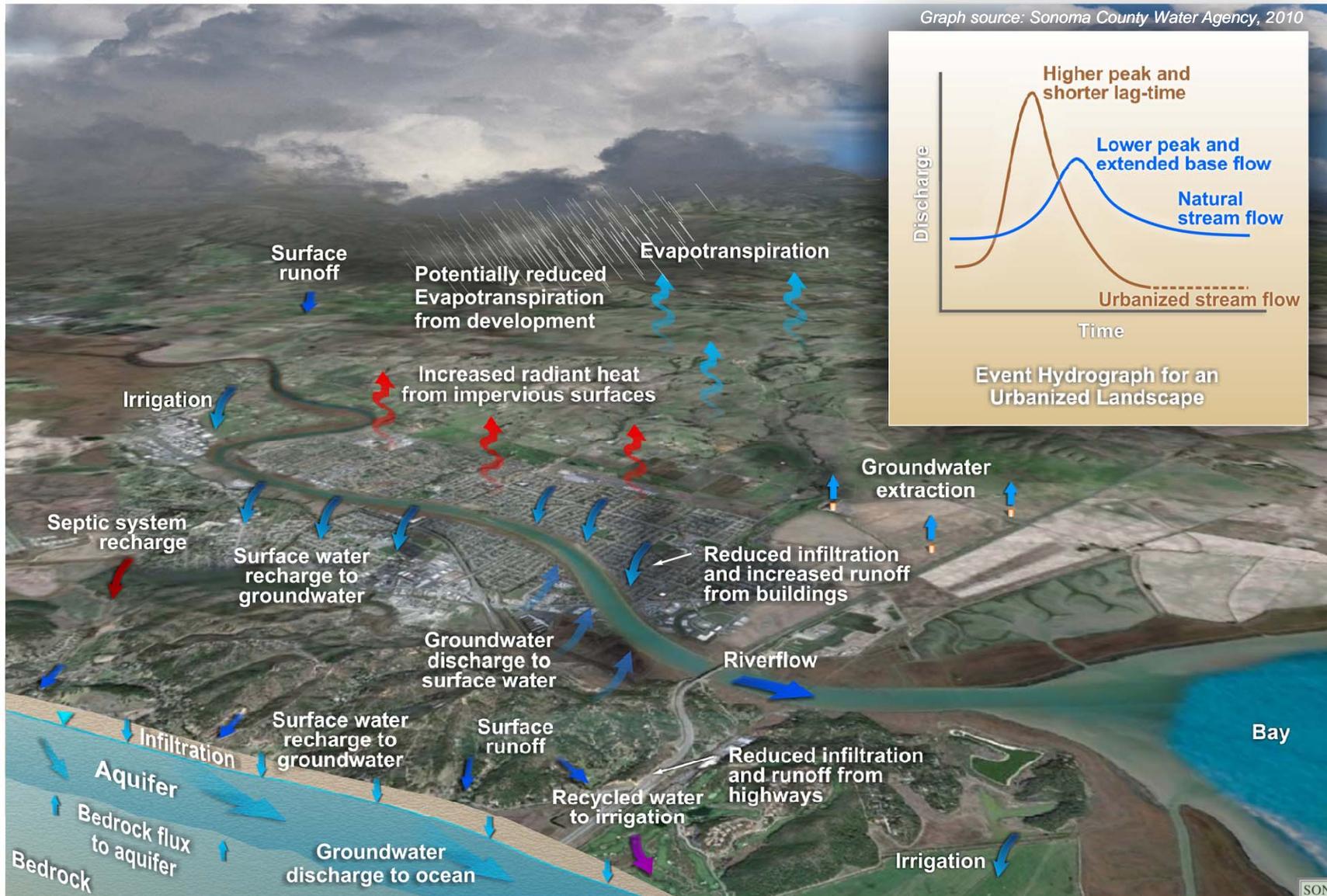


Issues: Groundwater



- Groundwater conditions study and management plan completed
- Declining groundwater levels
 - El Verano
 - Southern Sonoma Valley
 - Carriger Creek

Conceptual Hydrologic Cycle of Sonoma Valley



Graph source: Sonoma County Water Agency, 2010

Note: not to scale

Supporting Project Objectives

Water quality

Water supply

System sustainability

Ecosystem

Agricultural land

Open space

Community benefits

- **Water quality**
 - Improve water quality of surface and/or groundwater supplies
- **Water supply**
 - Increase or improve water supply availability, reliability and flexibility for domestic, municipal, industrial and agricultural use and for the environment
- **System sustainability**
 - Support energy and water efficiency and climate change resiliency of water management systems and developed supplies

Supporting Project Objectives

Water quality

Water supply

System sustainability

Ecosystem

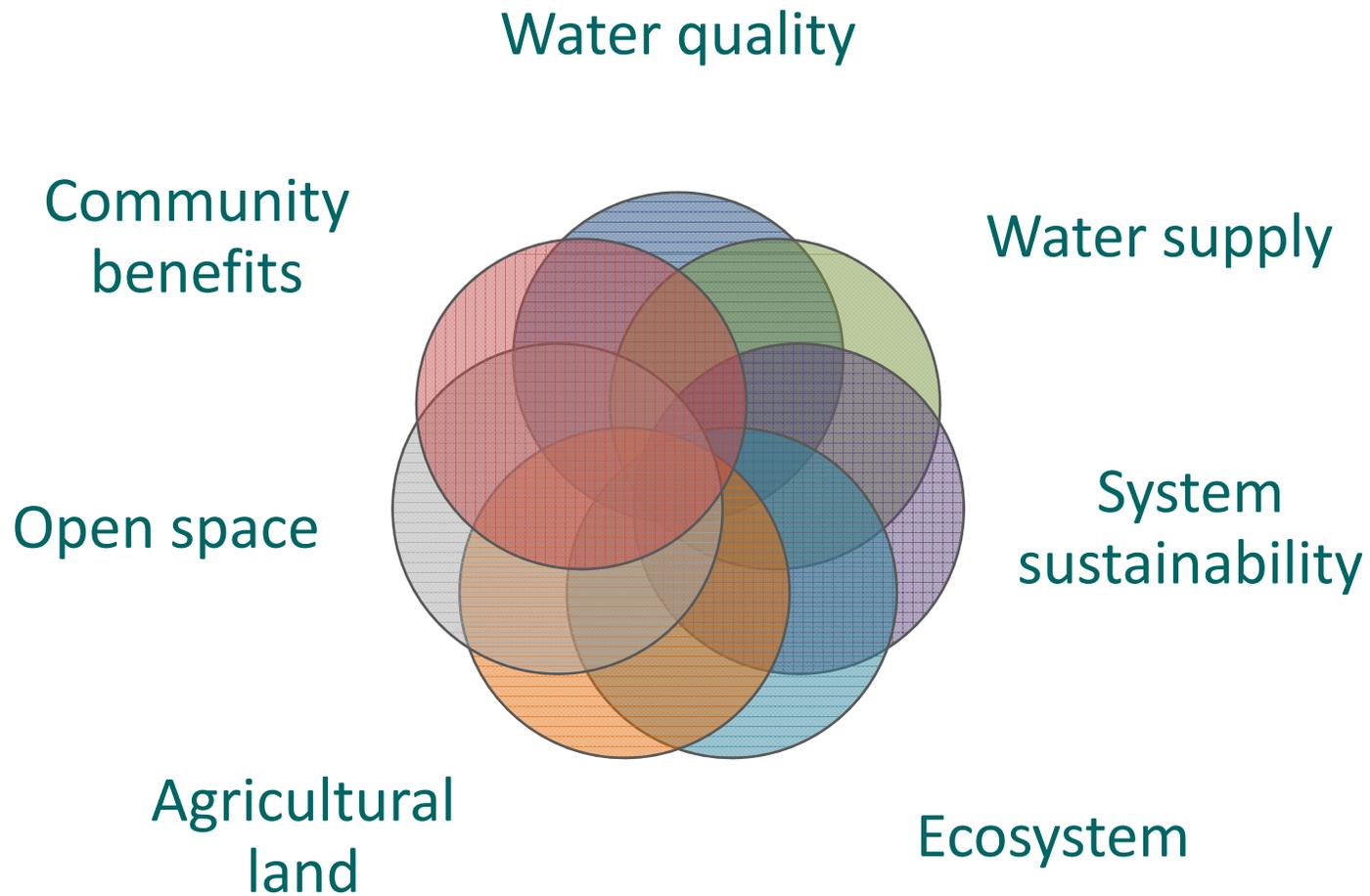
Agricultural land

Open space

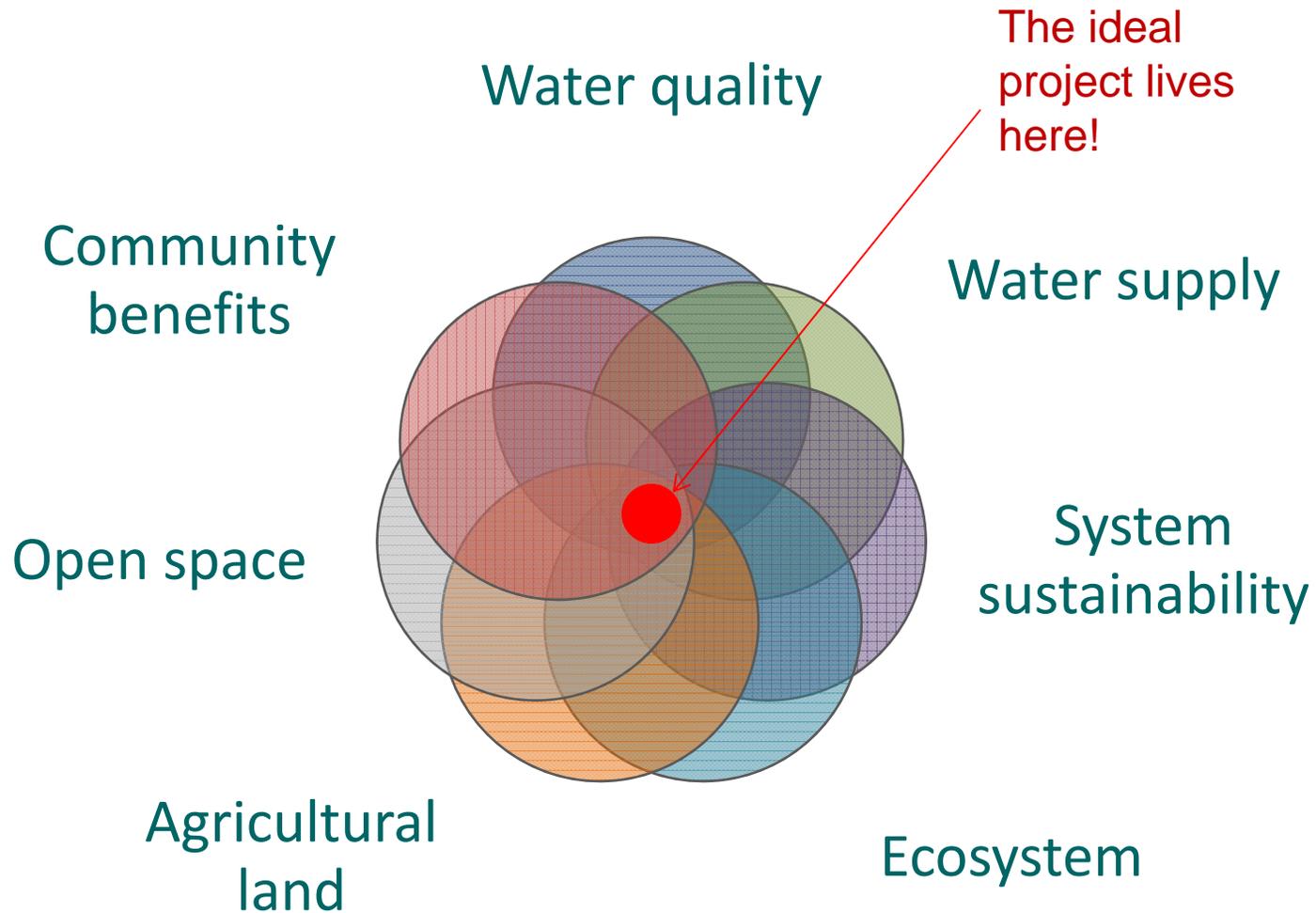
Community benefits

- **Ecosystem**
 - Improve ecosystem function and/or enhance habitat, especially for special status species
- **Agricultural land**
 - Preserve agricultural land uses
- **Open space**
 - Preserve and/or enhance open space
- **Community benefits**
 - Create and/or enhance recreation, public access, education, etc.

Supporting Project Objectives



Supporting Project Objectives





Betty Andrews
Principal
bandrews@esassoc.com



www.sonomacountywater.org