SLIDES: Water Planning in California: Past, Present, Future
Ellen Hanak

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California’s variable climate requires us to prepare for droughts and floods.

Average annual precipitation

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SOURCE: Western Regional Climate Center
The Past: A long history of statewide planning, focused on strategic state infrastructure

- 1930 State Water Plan – basis for the Central Valley Project
- 1959 California Water Plan (Bulletin 160) – basis for State Water Project
- Technical process, little public input
- In later years, behind the curve of new reality on the ground
20th century planning legacy: A highly engineered water system
2005, 2009, 2013 Bulletin 160s have adapted to new realities:

- Focus since 2005 on broadening portfolio of options (non-traditional supplies, demand management)
- Focus since 2009 on regional integrated management
- Strong public advisory component, extensive consultation
- **But** no strategic focus for state policy
- And no integrated technical analysis of options
In recent state water plans, nontraditional sources dominate portfolio.

Potential increases in annual supplies, 2000-2030

- Urban conservation
- Underground storage
- Recycled municipal water
- State-federal surface storage
- Agricultural use efficiency (net)
- Desalination
- Conveyance
- Cloud Seeding

Source: California Water Plan Update, 2005
The Present (2): State’s key role is nudging local/regional action

- Most water sector investments now local, regional
- State has played a very useful role by:
  - Requiring local planning (with citizen enforcement)
  - Regular water planning (progressively strengthened since early 1980s)
  - Connection between water supply and land use (effective since 2001 legislation)
  - Tying state grants to desired behavior (the carrot approach)
    - Urban water planning
    - Collaborative groundwater planning
    - Integrated water management
Local agencies raise most of the $30+ billion spent annually on water.

**Annual water system spending (2008–2011)**

- **Water supply**: $16.9 billion
- **Water quality**: $10.1 billion
- **Flood management**: $2.2 billion
- **Aquatic ecosystems**: <$1 billion
- **GO debt service**: <$1 billion

**Breakdown by Source:**
- Federal (4%)
- State (12%)
- Local (84%)

**Source:** Hanak et al., Paying for Water in California (PPIC, 2014)
The Future: What’s still missing

- Set strategic state priorities
  - Brown administration’s *Water Action Plan* a good start
- Build a more complete, transparent water information system
  - Fill data gaps and organize it; make models transparent
- Conduct transparent, integrated state-level analysis of options for strategic investments
  - Esp. for storage, conveyance
- Promote real integrated regional planning
  - Water supply, quality, floods, ecosystems, land use
Our pipedream: Integrate actions within large watersheds

Current integrated regional water management areas

Proposed regional stewardship authorities
More information:

- Hanak et al. (2011) *Managing California’s Water: From Conflict to Reconciliation*. Public Policy Inst. of CA
Thank you!

California Journal, 1991
Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.