

## Water Plan Regional Workshop Summary – Fortuna, CA

### OVERVIEW

The 2009 update of the California Water Plan, Bulletin 160 (Water Plan) is based on a collaborative approach that engages a wide range of stakeholders and the public in a variety of ways. The Water Plan team is receiving recommendations from a standing Steering Committee, comprised of representatives from 18 State agencies, and an Advisory Committee, with 39 representatives from organizations representing statewide interests. The involvement of regional and local interests is brought in through a series of public workshops conducted in each hydrologic region.

Each workshop consists of three major presentations to describe: the Water Plan, Regional Reports, and regional approach. Immediately following each presentation, workshop participants engage in brainstorming discussions in a small group format. A workshop for the North Coast hydrologic region was held on October 11, 2007 in Fortuna, CA. Copies of the workshop presentations, handouts, and materials are available on the Water Plan website at [www.waterplan.water.ca.gov/materials](http://www.waterplan.water.ca.gov/materials).

A brief recap of the presentations is provided in the following paragraphs and the remainder of this document provides a summary of the small group discussions. Flip charts were used to record ideas generated during the discussions and transcripts of the flip charts are located at the end of this document.

Paul Dabbs, Project Manager for Update 2009, presented an overview of the Water Plan Update process. This presentation described the approach and structure for the 2005 Update, as well as the process for the 2009 Update – including meeting schedule and opportunities for involvement, key activities and work products, and related content. The major sections of the Update include: data on water supply, use, and quality; water planning scenarios; water management strategies; Regional Reports; and reference materials and technical reports. Following this presentation, workshop participants were asked to identify additional items that should be considered for inclusion in the Water Plan.

In the second presentation, Tito Cervantes, Regional Lead for the Northern District for the Department of Water Resources (DWR), reviewed the Regional Reports for the North Coast Hydrologic Region. Each regional report describes regional data and hydrologic conditions, regional challenges and accomplishments, and regional water planning efforts. The discussion related to this presentation asked for suggestions to improve the content of the Regional Report for the North Coast region. Participants were also asked to identify and provide contact information for good sources in obtaining and verifying regional data sets.

The final presentation, by Paul Dabbs, recapped the regional approach proposed for updating the Water Plan. The approach uses regional workshops, an annual regional forum, and an annual plenary session to bring in local perspectives, issues, and concerns into the Update process. The ensuing discussion asked for recommendations to: improve the proposed approach; encourage the continuation of regional dialogue on water management; and identify others who need to be part of the regional conversation on water.

The workshops also included brief presentations on related statewide water initiatives, including the Integrated Regional Water Management (IRWM) grants program, Flood Safe program, and Statewide Water Analysis Network (SWAN). The SWAN is an open forum of technical expertise that serves as a technical advisory group to Update 2009.

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### ***DISCUSSION ON WATER PLAN CONTENT***

After hearing the presentation on the approach, content, and structure of Update 2009, workshop participants were asked to brainstorm other topics that should be considered for inclusion in the Water Plan. Workshop attendees were specifically asked to think about regional issues and concerns that might benefit from additional attention. Four themes that emerged during the group reports included:

- a. the interconnection between groundwater and surface water
- b. climate change impacts on regional water supply, storage, and flooding (severity and frequency); temperature shifts and effects; changes in rainfall budget
- c. enforcement of water rights (e.g. overappropriation; unpermitted/illegal diversions)
- d. impacts of development; linking development and land use to water planning (Smart Growth, general plan Water Elements, reduction of greenhouse gases)

Other topics that were identified included:

- e. water quality (boron; mercury; non-point sources; groundwater; sediment impacts to fish)
- f. small surface storage projects, and permitting/regulatory obstacles to small reservoirs
- g. aging infrastructure – especially those systems close to the coast
- h. supply: regional self-sufficiency for water resources; adequate supplies for Tribes
- i. protect instream flows for fish

### ***DISCUSSION ON REGIONAL REPORT CONTENT***

The discussion groups suggested a wide range of additional topics that might be included in the Regional Reports:

- a. regional data:
  - discuss social and economic value of water use at local level - what are the economic drivers for water in this region?
  - include interstate and international systems and issues
  - under “State of the Region” report status of area or County of Origin water rights compliance per State Court of Appeals Decision 1641 (all beneficial uses in area must be met before exports are allowed)
  - evaluate changes to future floods from removal of dams or other structural changes
  - overlay a map of groundwater recharge zones with development and land use changes; show changes in groundwater supply and quality; what increased pressure on surface waters?
  - provide more information on small groundwater basins (older reports had great information on this)
  - what is the impact of water bottlers? this should be investigated
  - understand local hydrology as related to groundwater conjunctive use
  - discuss local effects of water transfers; limit exports – link to reservoir levels
  - discuss risk/vulnerability of supply and treatment facilities to disasters; are there risk management analysis models relating disaster impacts to land use, water supply?

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- b. water supply/demand/quality data:
  - need estimate/quantification of illegal/unpermitted water use (drills, wells, diversions)
  - water supply and water quality impacts from illegal drug production (pot farms, meth)
  - more detailed quantification of future water needs for each region/river basin
  - how would Smart Growth measures adversely or positively impacts water quality through measures such as increased use of permeable asphalt, etc.
  - in the section on “looking to the future,” consider what might be possible with smaller reservoirs/storage scattered throughout the region
  - how will water balance change as region moves from extractive economy to tourism, second-home ranchettes, hobby farms (and in Sonoma County, population increase)
  - evaluate infrastructure needs: for replacing aging systems and for new development
  - correlate impact of wells on aquifers
  - how does geology (fractured bedrock v. alluvium) impact water quality, quantity, use
  - how does conversion of timberlands affect water supply
  - TMDLs for sediment and temperature for watersheds besides the Trinity
- c. State of the Region should describe:
  - restoration activities; energy use/greenhouse emissions; stormwater permits, treatment and storage; flood control systems; water conservation; and water recycling efforts
- d. challenges:
  - include illegal water use in this section
  - Class II streams sucked dry at certain times of year
- e. resource management strategies:
  - look at impacts to local uses and downstream users
  - investigate and support water catchment systems

### ***DISCUSSION ON REGIONAL APPROACH, OUTREACH, AND NETWORKING***

At the workshop, participants commended DWR for developing a good foundation for the regional approach. Additional strategies and contacts were suggested for successful regional outreach and involvement:

- a. process suggestions:
  - provide webcasts (visual and audio) – if SWRCB can do it, so can DWR!
  - invite news media to events; broader community workshop with general media
  - use League of Cities monthly magazine for CWP information
  - use television, PBS, or California Connected show to provide CWP information
  - send notices (attractive, 2-sided brochures) to all libraries and museums in State
  - advertise to public, even when piggy-backing on meetings of other groups
  - very helpful to have a DWR representative at the table
  - where does FEMA (and FEMA funding requirements) fit in?

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- b. evaluate representation:
- bring in representatives for Oregon watersheds
  - Tribes, Klamath Inter-Tribal Fish and Water Commission (Hoopa, Yurok, Klamath...), specific contacts suggested for the Yurok Tribe
  - use State Association of Counties resources to notify local supervisors; LAFCO
  - county officials, health departments, all 58 CSDs - PUDs
  - watershed groups, Humboldt Watershed Council; Sonoma Water Information Group
  - developers, builder associations, industry (e.g. timber), Ca. Forestry Assn. (Sac.)
  - unions, local business groups, Chambers of Commerce, commercial sectors
  - academics: Humboldt State University, College of the Redwoods, Santa Rosa JC
  - UC Cooperative Extension, Farm Bureau, granges, land trusts, RCDs
  - ag interests: cattlemen's associations (Siskiyou County), Klamath Water Users Assn., Tule Lake growers, grape growers, organic farmers
  - recreation interests: Forever Resorts (houseboats), river rafting groups
  - Salmon Coalition, fishermen's assns., Stormwater Coalition, Humboldt Baykeepers
  - League of Women Voters (local chapters and statewide)
  - Russian River watershed property owners associations
  - gravel operations, energy providers
- c. regional follow-up:
- open, web-based modeling is quite useful in getting communities involved (quality assurance level needs to be disclosed)
  - outreach to youth and families; curriculum for schools
  - develop publicly accessible, web-based scenarios for (surface and ground) water resources, climate change, population, land use, irrigation, power plants, etc. (there are off-the-shelf systems being used by other states for wetland resources)
  - proclaim April as "Water Month"
  - attend general plan update sessions on water resources, land use, transportation

### **CLOSING REMARKS**

At the close of the workshop, Paul Dabbs expressed thanks to all who attended and participated in the session. A special thank you was extended to the North Coast IRWMP Conference, for providing time within their conference program for the workshop.

A final reminder was given to participants on contacts for the Water Plan: Tito Cervantes is serving as the point of contact for regional coordination in the Northern District (the northern portion of the North Coast Region). He can be contacted via email at [cervante@water.ca.gov](mailto:cervante@water.ca.gov) or by phone at (530) 529-7389. Pierre Stephens is the regional lead for the Central District of DWR (the southern portion of the North Coast Region). Pierre can be contacted via email at [jrstephe@water.ca.gov](mailto:jrstephe@water.ca.gov) or by phone at (916) 651-0700. Paul Dabbs, project manager, provides general oversight for Update 2009 and can be contacted via email at [pdabbs@water.ca.gov](mailto:pdabbs@water.ca.gov) or by phone at (916) 653-5666.

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North Coast Hydrologic Region – Fortuna, October 11, 2007**

**Table A**

*Regional considerations to include in Update 2009:*

- urban growth management should be premised on water limits
- State should help/fund County General Plan updates for full Water Elements
- water planning should be linked (prerequisite) to Land use Planning
- provide water supplies to Tribal lands that do not have adequate water
  - water quality needs also must be resolved (groundwater)
  - water for fire protection on Tribal lands
- climate change modeling should provide results/impacts to each hydrologic region
- climate change impacts on water storage/supplies and on flooding (frequency and severity)
- full discussion of “trade-offs” in future water management decisions
- set limits to Trinity River exports that are based on reservoir storage
- protect instream flows for fish
- regions should be self-sufficient in use of water supplies
- State’s future water resources should prioritize strategies that support Smart Growth and reduction of greenhouse gasses

*Suggestions regarding regional reports:*

- understanding the critical economic and social value of water use on the local level; impacts on people and downstream users
- understand local hydrology as related to groundwater conjunctive use (surface and groundwater interactions)
- within region, identify average greenhouse gas emissions per person for different subareas
- add section (6-c) to report status of area/County of Origin water rights compliance per State Court of Appeals Decision 1641 (all beneficial uses in area must be met before exports are allowed).
- more detailed quantification of future water needs for each region/river basin
- water use should consider each region’s “cultural ecology”
  - the way people live with the lands, use water, and how that is evolving over time (cultural trends)
- evaluate changes to floods in future from removal of dams (Klamath) or other structural changes

*Regional outreach and networking:*

- use League of Cities monthly magazine for CWP info
- for State Association of Counties, local supervisors have Not received any CWP notices
- use television, PBS, or California Connected show to advertise CWP info
- proclaim April as “Water Month”
- send notices (pretty 2-sided brochures) to all libraries and museums in the State
- meetings held in local libraries – representative of town informed to lead local gathering

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**Table A, cont'd.**

- other groups:
  - Klamath Water Users Association (ag focus)
  - Tule Lake Growers
  - several “watershed councils” along the Klamath River system
  - contact academic interests (Humboldt State University, Santa Rosa JC, College of the Redwoods
  - Siskiyou County Cattlemen’s Association
  - Forever Resorts – recreation business on lakes in region [houseboat and water craft rentals]
  - local river rafting groups (don’t know names)
  - Klamath Inter-Tribal Fish and Water Commission (Hoopa, Yurok, Klamath, etc.)
  - California Forestry Association in Sacramento
  - local business groups; Chamber of Commerce
  - unions
  - League of Women Voters (local chapters and statewide)
  - Building Industry Association
  - ask the Water Resources Library at UC Berkeley who they would suggest

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**Table B**

*Regional considerations to include in Update 2009:*

- limit transport of water to Southern California
  - use incentives to increase water conservation in urban areas like LA
- interstate issues like Klamath need to be addressed
- international water transport (Canada, Mexico)
- small-scale water storage for water security and environmental purposes (store in winter, don't draw it out in summer), save as reserve
- cumulative effects of rural development, water use, and water quality; no good regulations or enforcement
- rural wells with contamination problems
- regional water quality: concerns about contaminants and public health
- sediment influx and its effects on salmon

*Suggestions regarding regional reports:*

- need estimate/quantification of illegal drills, groundwater wells, and diversions included in water budget
- concern that illegal diversions have huge skew on figures/bar graphs being presented by DWR
- is illegal use more of a regional area issue? concern that illegal use issue is not even being discussed – propose that the be included as “Challenge to Rural Water Supply” in Chapter 2
- Class II streams sucked dry at certain times of year
- consider how to reach out and integrate with people
- conversion of timberlands, and effects of TPZ (timber production zones) to urban development as it affects water supply
- TMDLs for temperature and sediment for other watersheds besides Trinity
- effect of climate change on rainfall budgets
- temperature shifts and effects
- consideration of new dams?
- consideration of surface water quality
- consider water storage at both large scale and individuals
  - provide incentives and education for individual water storage
- need more info on existing groundwater storage
- consider how climate change affects supplies and uses
- consider future trends in endangered species listings and how it may affect water supplies
- address and track accomplishments in water reductions (e.g. “20% reduction in ‘x’ county” – would help in developing ordinances to project uses and measure uses [by showing] baseline and changes)

*Regional outreach and networking:*

- broader community workshop, using general media
- work through RCDs, watershed groups to get input from people who won't come to workshops
- advertise to public even when piggybacking on meetings of other groups
- very helpful to have a DWR representative at the table

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**Table B, cont'd.**

- other groups:
  - Farm Bureau
  - Chamber of Commerce
  - watershed groups, Humboldt Watershed Council
  - county officials, health departments
  - UC Cooperative Extension
  - Builders Exchange
  - Stormwater Coalition
  - Humboldt Baykeepers

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**Table C**

*Regional considerations to include in Update 2009:*

- old systems (“infiltration galleries”) for surface water; they are close to the coast – potential issues
  - saltwater intrusion
  - Coho salmon impacts
  - biggest concern is deferred maintenance – if we don’t maintain, we will need to spend a lot more money on water treatment
  - recommend that State agency landowners see if existing systems are appropriate given endangered species issues and potential climate change
  - should they do whole new systems instead of throwing good after bad
  - e.g. State Parks water collection systems serve campers, employees, (resident employees and their families?)
  - there are a lot of aging small systems throughout the North Coast; it is easier to get maintenance dollars than it is to step back and think about what is the best system now
- water rights → how to enforce? overappropriation and illegal uses (unpermitted)
- levees at mouths of coastal river streams
  - some levees were put in by farmers and other
  - let’s look at floodplain function and ecological function; spend time and resources to study possible changes – levee setback?
  - land purchase by State/Federal land easements – what are the opportunities?
- climate change with respect to water supply and extreme floods (and resulting scouring and riparian/wetland habitat destruction and resulting impacts on endangered species)

*Suggestions regarding regional reports:*

- illegal water diversion (negative impacts on fish) from illegal drug production
  - toxics pollution (from pot farms and meth)
  - nutrient pollution
- native habitat destruction from illegal drug production (pot and meth)
- want more info on small groundwater basins (older reports had great info on this)
  - expand groundwater level monitoring network to better cover entire basin
  - as development increases, groundwater impacts are likely to increase too
- what is the impact or potential impact of water bottlers?
  - investigate this
  - does it change water balance
- groundwater recharge zones overlay map with increase in development and land use changes; show overlay of decrease in groundwater supply and increased pressure on surface waters
  - potential problems from decreasing water quality in groundwater recharge zones
- how will water balance change as region moves from extractive economy to tourism, 2<sup>nd</sup> home ranchettes, hobby farms (and in Sonoma County...population increase)?
- how would Smart Growth measures in increase use of permeable asphalt, etc. impact water quality (negatively or positively)?

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**Table C, cont'd.**

- how much is re-used water being used?
  - where could it be used more? how much?
  - what is the public perception of using it themselves? using a product (e.g. wine) that re-used water was used on?
  - how could outreach be improved?
- what are economic drivers for water in this region, that are different from economic drivers in other regions?
  - why? [what accounts for these differences]
  - how could this be addressed?
  - what are unknowns?
  - identify areas that we don't know enough about yet – needs for additional studies
- are the scenarios run specific to North Coast needs/issues/conditions – or are they run statewide?
- is vulnerability of water supply and wastewater treatment facilities (to natural disasters and man-made disasters) being addressed?
- given fractured geology in parts of the region, how does that impact North Coast groundwater and surface water quality, quantity, use, and challenges?
  - how are geologic conditions in other parts of the North Coast considered? (bedrock v. alluvium)

*Regional outreach:*

- Oregon → what about stuff that happens in Oregon watersheds that flow into California?
  - needs to be addressed; frame the issues
  - let's dialogue with the Oregonians!
- where does FEMA fit in? how does FEMA funding fit in?
  - are FEMA funding requirements meshed with California grant funding?
  - FEMA-preferred options are not necessarily the best
- webcast: (visual and sound)
  - if they want to better reach outlying communities (that have sufficient access to internet)
  - advertise by email and other ways, that these webcasts are available
  - archive the webcasts on line (if SWRCB can do it, DWR can too!)
  - and have availability for web viewers to send in questions
- invite news media to events
- develop publicly accessible web-based scenarios for (surface and ground) water resources, climate change, population change, land use change, irrigation use change, power plants ...
  - use off-the-shelf systems
  - many states are developing these public, web-based systems for wetland resources)
- open, web-based modeling (like Wikipedia)
  - allows many to provide their inputs
  - needs quality assurance level disclosed, but can be quite useful for getting communities involved

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**Table D**

*Regional considerations to include in Update 2009:*

Top issues:

- support/encourage individual lifestyle changes that can reduce/conservate water use
- explore solutions to inevitable population growth/shifts (due to climate change or otherwise)
  - can our water supply handle it?
  - will other regions require our water?
  - will land use decisions regarding the environment hold up under severe population pressure?
- groundwater – more emphasis and recognition
  - about the interconnect with surface water
  - to quantify groundwater supply
  - investigation and support of recharge methods/areas/treatment (and the multiple benefits thereof – i.e. to agriculture, fish)
  - funding and policy support to local agencies for planning/management
  - discuss ramifications of use – i.e. costs for treatment, waste, energy
- increase small surface water reservoirs
  - may be more efficient than large reservoirs
  - hold winter flow, use this for ag in summer
  - address metals contamination (boron, mercury)
  - review/revise permitting and regulatory obstacles to small local reservoirs

*Suggestions regarding regional reports:*

- are environmentally driven land use decisions OK for safety (fire, erosion, etc.)?
- do risk management analysis models exist regarding land use development, earthquakes, floods, fire, etc. (as related to land use decisions and water supply)?
- more information on recharge areas for local supplies – quantify, elaborate regarding water quality implications
- increase investigation and support for water catchment systems – i.e. roof catchment
  - slow and store in ground “rain gardens”
  - incorporate above ideas into land use (permitting) planning
  - INTEGRATE this plan with general plans
- ask public (other organizations, non-profits) for help if DWR doesn’t have the funding or resources to collect data
  - communicate the benefits
- increase use of voluntary water quality or water level monitoring activities

*Regional outreach and networking:*

- attend general plan update sessions on water resources and land use and transportation
- other groups to include in outreach:
  - all watershed councils (post request for comments on their listserves)
  - all 58 CSDs – PUDs (write, email)
  - Sonoma Water Information Group
  - LAFCO

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**Table D, cont'd.**

- Tribes
- local and State Farm Bureaus; granges
- Russian River watershed property owners associations
- Salmon Coalition
- other industry groups and profession associations:
  - organic farmers
  - gravel operations
  - fishermen's associations
  - grape growers
  - timber
  - land trusts
  - energy consultants, energy providers

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**Table E**

*Regional considerations to include in Update 2009:*

- groundwater/surface water interconnection
- water right enforcement
- decentralization of infrastructure
- climate change in relation to supply and habitat
- expand range of tools for non-point source

*Suggestions regarding regional reports:*

- correlate wells impact on aquifers
- energy use
- water recycling
- water transfer (local effects)
- planning expansion beyond current report
- MS4 permits
- restoration activities
- flood control
- stormwater treatment and storage

*Regional outreach and networking:*

- better PR
  - curriculum for schools
  - children and families
- tailor strategies to each region
- anticipate potential conflicts
- other groups:
  - developers
  - builder associations
  - industry (e.g. timber)
  - commercial sectors