



CALIFORNIA WATER PLAN, UPDATE 2013 GROUNDWATER WEBINAR 3 TULARE LAKE, SAN JOAQUIN RIVER AND CENTRAL COAST HYDROLOGIC REGIONS JUNE 4 2015, 1:00 P.M. - 2:34 P.M.

Meeting Summary

This webinar, based on the *California's Groundwater Update 2013: A Compilation of Enhanced Content for California Water Plan Update 2013*, focused on Tulare Lake, San Joaquin River, and Central Coast hydrologic regions. The presentation included the Department of Water Resources (DWR) findings from the regional elements of the Report, an overview of content, and a discussion of the future directions of California groundwater management. Following the session, a question & answer session was held with participants.

Attendance

In-person and registered/logged in participants totaled 142. Additional participants may have participated in conference rooms or some other private viewing location. A publically noticed, in-person viewing location was offered at the DWR Bonderson Building in Sacramento, California. The session was also recorded for future viewing by those not able to attend. See attachment A for more details on participation.

Meeting Notes

Welcome & Introductions

Session moderator Lisa Beutler welcomed the participants and introduced the DWR Groundwater team.

Kamyar Guivetchi, DWR, welcomed the attendees. He described that one of the things heard from stakeholders during previous Water Plan updates was a need for more groundwater content, and a more integrated approach. The 2013 Water Plan Update (Update 2013) featured a stakeholder Groundwater Caucus chaired by Abdul Khan and Dan McManus, and it was the most well attended Caucus group. The Caucus worked with DWR to develop a significant amount of information that supplemented the Water Update 2013. The information presented during the session was the first of several webinars on the regional chapters of the compilation report.

Mr. Guivetchi previewed for the audience that the content presented is what will help DWR as well as other agencies implement the Governors Water Action Plan, and also implementation of the Sustainable Groundwater Management Act (SGMA).

Overview of California's Groundwater Update 2013

Dan McManus introduced the technical team in attendance (Mark Nordberg, Charles McKenzie and Roy Hull) before beginning his presentation. He also noted that this was the third of six webinars presenting the Update 2013 findings to the public.

He also noted the contributions of the Groundwater Caucus members, and the evolution of how groundwater content has been treated by the California Water Plan.

Mr. McManus described the organization of the comprehensive report, and highlighted the contributions from around DWR, including those from staff members in the regional offices. He also noted that during this session they would only be able to give a small overview and he encouraged webinar attendees to download the Regional Reports to find additional details. He then introduced Mark Norberg to overview the Tulare Lake, San Joaquin River, and Central Coast hydrologic Regional Reports.

California's Groundwater Update 2013, with focus on Tulare Lake, San Joaquin River, and Central Coast hydrologic regions

Mark Nordberg presented on the information gathered for the basins contained in the report. His presentation included well infrastructure and groundwater monitoring, California Statewide Groundwater Elevation Monitoring (CASGEM) basin prioritization, groundwater quality, aquifer conditions and groundwater hydrographs, land subsidence, groundwater & conjunctive management, and report recommendations.

Well Infrastructure & Ground water Monitoring

Mr. Nordberg described the well data gathered for the Tulare Lake, San Joaquin River, and Central Coast hydrologic regions.

CASGEM Basin Prioritization

DWR's Basin Prioritization process described 515 alluvial basins and sub-basins. CASGEM prioritized 127 high & medium priority basins required to address SGMA. The basin Prioritization process is based on California Water Code Section 10933(b), and includes variables like population, irrigated acreage, total number of wells, and adverse impacts on local habitat and local stream flows. It's worth noting that SGMA added the adverse impacts on local habitat, and local stream flows. Mark also explained that following the 2016 basin boundary process, the basins will be re-prioritized.

Groundwater Quality

DWR partnered with all of the Regional Water Quality Control Boards to compile information to be incorporated into the report. The hydrologic region chapters include details from the data sources, including quality at community drinking wells, GAMA Priority Basin Project, and groundwater quality at domestic wells.

Aquifer Conditions & Groundwater Hydrographs

Mr. Nordberg shared 2005 – 2010 Groundwater averages relating to supply. He included figures that displayed breakdowns of the three hydrologic regions by Planning Areas.

The presentation also included an overview of water supply trends from 2002 – 2010 by the hydrologic regions being discussed in the webinar.

Groundwater Contours

Mr. Nordberg explained the process for developing groundwater contours was only undertaken in the Central Valley. Depth to Groundwater, and Groundwater Elevation are mapped across the valley floor. He noted that there are a variety of reasons to explain the variations seen in figures. He articulated

some of the methodology behind the calculations, and shared the website for the Groundwater Information Center. He also shared the link to the statewide webinars that Abdul Khan shared in April 2015 in conjunction with the deployment of Update 2013 information.

Statewide Inventory and Assessment of Groundwater Management Plans

DWR found that many areas are covered by existing plans, but many plans are deficient. Plan details are included in the individual regional reports. Reports also include details on:

- Groundwater Ordinances
- Special Act Districts
- Groundwater Adjudicated
- Other Groundwater Management Efforts
 - Integrated Regional Water Management Plan
 - Urban Water Management Plans
 - Agricultural Water Management Plans

Mark Nordberg answered two questions at the conclusion of his presentation:

Question 1: Regarding the availability of groundwater, how much is empirical information, and how much comes from well logs?

Answer 1: Nordberg replied that that volume numbers represent estimates. There are sections in the reports that describe methodology, but there are a variety of ways DWR estimates the numbers. There is reporting via well logs in the urban areas. Often rural data is based on land use information.

Question 2: Regarding the Spring 2010 contour maps shown in the presentation, what do they represent?

Answer 2: It shows some of the water table, but doesn't show some of the deeper confined aquifers. That is not to say that some if it may be inaccurate, because it may be a composite of other things. It is our best process for determining depth to water, but there is significant opportunity to improve them in the future.

California's Groundwater: Future Directions

Dan McManus described some of the future direction relating to the Governor's California Water Action Plan, the Sustainable Groundwater Management Act (SGMA), and DWR's Sustainable Groundwater Management Program.

He presented opportunities for the public to interact with the implementation of SGMA, and described some of the ongoing communication and outreach efforts, including:

- 1st Hydrologic Region Webinar: June 4, 2015
 - Tulare Lake, San Joaquin River, Central Coast (Recording will be posted online)
- 2nd Hydrologic Region Webinar: July 27, 2015
 - Sacramento River, San Francisco Bay, South Coast
- 3rd Hydrologic Region Webinar and Technical Appendices Webinar: August 26, 2015
 - North Coast, Colorado River, North & South Lahontan and Technical

Q&A

The moderator then relayed additional audience questions to the presenters as follows:

Question 3: You have a lot of information up to 2010, but what about after that?

Answer 3: DWR has been providing periodic updates, including those related to well drilling efforts. In response to the drought DWR also has updates to the Groundwater Information Center on a variety of topics. The slides from the webinar presentation include a link to 2010 - 2014 groundwater levels as part of the drought update.

Question 4: You showed quite a few pictures of central California, are there other kinds of well data? What about GeoTracker?

Answer 4: DWR uses information from CASGEM, USGS, or Reclamation – all publicly available data. However, just because DWR has a gap on the map, doesn't mean someone isn't collecting information.

GeoTracker is the Water Boards' data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites. Because GeoTracker tracks contamination sites its wells are typically shallow.

Well completion reports are reported to DWR through the regional offices.

Question 5: How much groundwater is left?

Answer 5: Many ask this question and it's something that needs to be looked at more closely. Often DWR tries to stay away from describing full basin capacity – because that total number doesn't do much for managers. Once the base of freshwater maps for the central valley are characterized and completed, DWR will have a better idea about total volume for this region. There are deep confined aquifers in many locations and wells that pull from a variety of systems. There are also concerns about the quality of water being extracted.

Question 6: What are you looking at in terms of aquifer collapse?

Answer 6: Aquifer collapse is an issue, and it happens mostly in the fine grain portions of the aquifer. The hydrograph drawing down 10 feet in some areas – The presenters did not know if DWR had yet calculated the total loss of storage.

Question 7: Is there a role for the private sector to help assist? What about non-profit?

Answer 7: There is a huge role for them to play, not just in SGMA, but also with integrated regional water management (IRWM). DWR will have listening sessions to look at these changing basin boundaries, and also how to evaluate the GSPs. DWR welcomes public input. Ultimately, all of these must comply with the plans of cities and counties that will be an important avenue for the local General Plan processes. Education is important too, education about groundwater is important. All the legislation that led up to SGMA asked for voluntary approaches. Under SGMA,

those 120 + high and medium priority basins are going to be required to take action. DWR encourages everyone to read the legislation from front to back. Note that if governance is not structured in the required areas by July 2017, then the Water Board can move to take over management and enforcement of a basin. Many of the local agencies may not have in-house staff that are able to do what is required of them, so this presents an opportunity. Participants may view a list of GSA applications on the DWR website.

Question 8: Can people use the images here for information sharing?

Answer 8: Yes, just acknowledge the DWR California Water Plan, Update 2013 as the source of the information.

Question 9: Is there any authority to stop people from extracting water from private domestic wells?

A: Yes, the GSAs have that authority in their area and may cut groundwater production. Currently this type of restriction would not impact small private well owners, but anyone larger could be impacted. If GSAs are not doing management actions to improve sustainability, then agencies may be required to step in and reduce consumption.

Closing Remarks

The DWR staff and moderator thanked the participants for their attention and contributions during the Question and Answer session. They also reminded of the upcoming sessions in the Webinar series and provided more information of the location of reference documents.

They also indicated the meeting would be recorded and posted on the California Water Plan Calendar (<http://www.waterplan.water.ca.gov/materials/index.cfm?subject=june0415>) with the other meeting materials

Meeting Adjourn

The meeting was adjourned at 2:34 p.m.

ATTACHMENT A

Registered On-line Attendees¹

¹ Registered attendees represent those individuals that provided their name and logged into the webinar. In some cases more than one individual may have attended the webinar in a conference room or some other viewing location. Names are printed as typed during the registration process. Participants are not required to disclose their identity but an email address is required for the purpose of webinar notifications.

ATTACHMENT A

1. Chanie Abuye
2. Maegan Allen
3. Craig Altare
4. Christina Babbitt
5. Dezaraye Bagalayos
6. Steve Balling
7. David Bolland
8. Mark Boucher
9. Carney Briggs
10. Laura Brown
11. Craig Carnes
12. Mesut Cayar
13. Theodore Chester
14. Juliet Christian-Smith
15. Jeffrey Clarin
16. Carole Combs
17. Mike Cosenza
18. Sean Culkin
19. Stephen Cullen, Phd.
20. Barbara Dalgish
21. Kristin Dobbin
22. Ryan Drake
23. Bill Ehorn
24. Adrienne Ellsaesser
25. Leon Elwell
26. Steve Ewert
27. David Fairman
28. Teresa Fung
29. Mark Gilkey
30. Kinzie Gordon
31. Sunny Grunloh
32. Edric Guise
33. Jose Gutierrez
34. Chuck Hammond
35. Larry Hampson
36. MD Haque
37. Ken Harris
38. Peggy Hauselt
39. Thomas Hedt
40. Ryan Hernandez
41. Joseph Hopkins
42. Courtney Howard
43. Sarah Hubert
44. Matthew Hurley
45. Mark Hutchinson
46. Bunnie Ibrahim
47. David Inouye
48. Bernard Jimenez
49. Alison Jones
50. Stephen Keese
51. John Kirk
52. Vern Knoop
53. Justin Koenigshof
54. Vicki Kretsinger
55. MARK LARSEN
56. Alex Lau
57. Joseph Lawlor
58. Julia Lew
59. Debbie Liebersbach
60. Christopher Lyles
61. Roger Masuda
62. Miles Mccammon
63. Glenn Meeks
64. Ron Melkonian
65. Edward Meyers
66. Martin Milobar
67. Sopac Mulholland
68. Kim Nakahara
69. Peter Navas
70. Anthony Navasero
71. Thomas Neely
72. Eric Nichols
73. Mike Novo
74. Debi Ores
75. David Orth
76. Peter Osmolovsky
77. Carolyn Pande
78. John Papatthakis
79. Curtis Payton
80. Karen Petryna
81. Darren Plumlee
82. John Powderly
83. Jason Preece
84. Roger Putty
85. Laleh Rastegarzadeh
86. Lara Reising
87. John Ricker
88. Edith Robbins
89. Steven Rodriguez
90. Daniel Rourke
91. Timothy Ruby
92. Mayo Ryan
93. Debbie Saffell
94. Steven Saiz
95. Erica Sasman
96. Sandra Schubert
97. Scott Sellers
98. Michelle Selmon
99. John Serviiss
100. Benjamin Siegel
101. Ellen Silva
102. Matthew Simis
103. Chris Soehnen
104. Vincent Sorena
105. Bethany Soto
106. Cameron Speir
107. Shad Springer
108. William Stretch
109. Neha Subramanyam
110. Shannon Sweeney
111. Judie Talbot
112. Sonja Thiede
113. Krista Tomlinson
114. Michael Trapani
115. Jack Tung
116. Greg Underwood
117. Anna Valdivia
118. Kari Vigerstol
119. Patrick Vowell
120. Spencer Waterman
121. Catherine Weber
122. Garrett Weiss
123. Gregg Werner
124. Ginia Wickersham
125. Patricia-Anne Wintersun
126. Amy Woodrow
127. Brett Wyckoff
128. Betty Yee
129. Joe Zilles
130. Jeanne Zolezzi
131. Michael Callahan
132. Chris Montoya
133. Be Swann
134. Matt Van Der Linden

ATTACHMENT A

DWR Staff

- 135. Kamyar Guivetchi
- 136. Charles McKenzie
- 137. Dan McManus
- 138. Mark Norberg
- 139. Roy Hull
- 140. Francisco Guzman

Facilitation Team

- 141. Lisa Beutler
- 142. Joshua Biggs