1. CALL TO ORDER
Bruce Jaffe called the meeting to order at 7:04 p.m.

2. ROLL CALL
   Voting Committee Members Present:
   Bruce Daniels, Soquel Creek Water District
   Bruce Jaffe, Soquel Creek Water District
   John Benich, Central Water District
   Bob Postle, Central Water District
   Bill Wigginton, Seascape Greens Homeowners Association

   Other Committee Members Present:
   John Leopold, County of Santa Cruz
   Cynthia Mathews, City of Santa Cruz
   Micah Posner, City of Santa Cruz

   Committee Members Absent:
   Tom LaHue, Soquel Creek Water District

   Others Present:
   Ralph Bracamonte, Manager, Central Water District
   John Ricker, Santa Cruz County Water Resources Division Director
   Taj Dufour, Soquel Creek Water District
   Melanie Schumacher, Soquel Creek Water District
   Ron Duncan, Soquel Creek Water District
   Jon Kennedy, Private Well Owner
   Heidi Luckenbach, City of Santa Cruz
   Karen Reese, Executive Assistant/Board Clerk, Soquel Creek Water District

   Others Present:
   Derrrik Williams, HydroMetrics WRI
   4 members of the public

3. APPROVAL OF MINUTES
   3.1.1 Minutes of January 29, 2015
   
   MOTION: John Benich; Second; Bill Wigginton: To approve the minutes of January 29, 2015. Motion carried unanimously.

   3.1.2 Minutes of March 25, 2015
   One minor change was made.

   MOTION: Bruce Daniels; Second; Bill Wigginton: To approve the minutes of March 25, 2015 with minor change. Motion carried. Bruce Jaffe abstained.
4. **ORAL COMMUNICATIONS** (items not on the Agenda)
Katherine Sweet asked to speak to Item 5.7 and her request was granted. She talked about the composition of the committee, suggesting that there be three members of private well owners/users.

5. **ADMINISTRATIVE BUSINESS**

5.1 Accept Soquel-Aptos Area Groundwater Management Annual Review and Report (ARR) for Water Year 2014

Derrrik Williams, HydroMetrics, WRI presented the Annual Review and Report (ARR) for Water Year 2014 (**Attached as Exhibit A**) and answered questions from the committee. It should be noted that this is the last annual report for the time being as the committee voted to continue the quarterly reports only as the move is made toward forming the Groundwater Sustainability Agency (GSA).

| MOTION: Bruce Daniels; Second; Bob Postle: To Accept the Soquel-Aptos Area Groundwater Management Annual Review and Report for Water Year 2014. Motion carried. |

5.2 Basin Groundwater Model Update

Derrrik William gave a presentation (**Attached as Exhibit B**) on the groundwater model and answered questions from the committee.

5.3 Review and Approve Revised Third Amendment to the Joint Exercise of Powers Agreement (JPA) Amendment #3

Discussion was held. The agreement was signed by Soquel Creek Water District, Central Water District, and the City of Santa Cruz. The County of Santa Cruz is proposing changes, so the JPA will need to go back through the process of approval by each entity.

5.4 Approve Revised Soquel-Aptos Area Groundwater Management Annual Budget FY 2015-16

Discussion was held on the proposed budget for the committee, but voting was deferred until the third amendment to the JPA has been signed and the voting membership has been established.

5.5 Update from Subcommittee on Groundwater Sustainability Agency (GSA) Formation

Ms. Schumacher and Jon Kennedy, the subcommittee chair, reported the subcommittee has met twice and presented a handout summarizing their activities. Extensive discussion was held.
5.6 Update on Soquel-Aptos Area Community Engagement Pertaining to GSA Formation

Marci DuPraw, Managing Senior Mediator and Facilitator with the Center for Collaborative Policy, CSU Sacramento, discussed the current activities provided through the SWRCB-sponsored contract as well as the need for and the process of obtaining community participation in the GSA formation. Two public meetings will be held on June 30, 2015 to gather input from the public. Lengthy discussion of goals and objections was held.

5.7 Selection of Private Well Committee Representatives

Ms. Schumacher reported that 25 applications have been received for the private well owner seats on the committee. Until the 3rd JPA has been signed, the committee representation still stands at one private well owner. In the meantime, a letter will be sent to the applicants letting them know their applications have been received and why the process has stalled.

A nominating committee will be formed to review the applications and bring recommendations back to the BIG for selection.

MOTION: Bruce Daniels; Second; John Benich: The BIG chair will appoint a committee to review the applications and bring back a short list to a future meeting. Motion carried.

6. INFORMATION ITEMS – None

7. MANAGER’S REPORTS

7.1 Central Water District
No report

7.2 City of Santa Cruz
No report

7.3 County of Santa Cruz
Mr. Ricker reported the County will be recommended additional water use restrictions to the Board of Supervisors at their June 9, 2015 meeting. These include individual metering and reporting for small water systems of 5-199 connections.

7.4 Soquel Creek Water District
Mr. Dufour reported that since December, the District has not pumped from the two La Selva Beach area wells – Altivo and Seascape – due to Chrome 6.
8. **ADJOURNMENT**
Being no further business, the meeting was adjourned at 10:21 p.m. The next meeting of the BIG will be August 20, 2015.

SUBMITTED BY: 

__________________________
Karen Reese, Board Clerk

APPROVED BY: 

__________________________
Ron Duncan, Interim General Manager
Soquel Creek Water District
Annual Review and Report

- Part of Groundwater Management Plan implementation
  - Summarizes groundwater conditions
  - Provides a public record of groundwater data
  - Documents the status of groundwater management activities
  - Recommends any amendments to the GMP
- Streamlined, living document
- Not funded for 2015 as we move towards groundwater sustainability planning
Basin Conditions Overview
Driest Year Since 1984

- Kraeger Gauge
- Mancarti Gauge
- Santa Cruz Gauge
- Main St
- Kraeger/Mancarti Average
- Kraeger/Mancarti Median
- Santa Cruz Average
- Santa Cruz Median

WY 2011-2012 Santa Cruz rainfall estimated based on De Laveaga Stn
Groundwater Levels vs. Protective Elevations

Notes:
- Protective elevations in Purisima area established by SCWWD for its coastal monitoring wells in deepest aquifer unit of nearby municipal production.
- Protective elevations in Aromas area established for SCWWD's A and B coastal monitoring wells. Aromas well with lower average groundwater level is shown.
- Target elevations for medium completions of City of Santa Cruz coastal monitoring wells (italics) specified for non-critically dry years, but displayed for critically dry year 2014 to compare with other years. Groundwater levels in 2014 at these wells and SC-1A were above minimum elevations specified for critically dry years.
- SC-9C is representative of the BC-Unit.
Groundwater Level Trends WY 2009-2013
Lowest Pumping Since 1984
Study Areas for Non-Water Agency Pumping
Sub-Basin Coastal Conditions
Western Purisima Coastal Monitoring
X-Seawater Intrusion in City Monitoring Wells

Moran Lake

Soquel Point
SC-1A Groundwater are Flat, but Above Protective Elevations

Garnet Well 2014 pumping was greater than 2012 or 2013

Includes data through spring 2015
Flat Trends in Other A Unit Wells (Below Protective Elevations)

SC-3A

**Includes data through spring 2015**

SC-5A

2014 Water Levels > 0
SoCWD Production Well
SoCWD Monitoring Well
Shallow Well
City of Santa Cruz Production Well
City of Santa Cruz Monitoring Well
Planned SoCWD Well Site
SoCWD Boundary
Purisima A, Fall 2014
Groundwater Elevation in feet amsl
Values next to the well symbols are groundwater elevations in feet amsl.

Well names in bold indicates well is used for contouring groundwater elevations.

Well names in italics indicates well is in the AA-unit.

The O’Neill Ranch Well and Beltz #12 Well are partially screened in the AA, but water levels appear more representative of the Tu unit.
Central Purisima Coastal Monitoring
Continuing Rise in BC Unit Wells (below protective elevations)

2014 Water Levels > 0

SC-9C

Includes data through spring 2015

SC-8D
Note:
Static groundwater levels in this area are highly dependent on well recovery times.
Aromas Coastal Monitoring
Seawater Intrusion Advancing at SC-A2

Includes data through spring 2015
Chloride Levels Continue to Increase in Well SC-A3A

Includes data through spring 2015
Accomplishments and Future Directions
Recharge Zone Mapping
Accomplishments

- New monitoring wells (Larkin Valley tank site, Quail run road)
- Replacement monitoring wells at Nob Hill site
- Completed CWD groundwater management study
- Commenced PVWMA groundwater model update
Accomplishments

• Both the City of Santa Cruz and Soquel Creek Water District initiated alternative supply studies
• Successful and substantial water use reductions due to community outreach
• County conducted studies of potential water transfers
• Properly destroyed abandoned monitoring wells
2015-2016 Priorities

1. Secure Supplemental Supply
2. Monitor Tu Unit
3. Use Groundwater Level Logger Data in Groundwater Management
4. Monitor Effects of 4th Consecutive Dry Year
5. Facilitate Formation of a Groundwater Sustainability Agency
6. Develop Groundwater Model, using ARR data
7. Undertake Geophysics Study to Locate Seawater Interface
Discussion
Soquel-Aptos Basin
Groundwater Model Update

May 21, 2015
Soquel Aptos Basin Implementation Group
Outline

- Model purpose and overview
- Schedule
- Progress and ongoing work
- Technical Advisory Group
- Upcoming deliverables
Model Benefits and Purpose - General

• Demonstrates and predicts effects of pumping on basin-wide water levels
• Predicts effects of pumping on stream flows
• Provide a tool for integrated groundwater management by all entities
Model Benefits and Purpose - Specific

- Provide best estimates of recovery times
- Provide estimates of recovery times for various pumping rates
- Provide best estimates of post-recovery yield
- Proved best estimates of Aromas area intrusion rates
Model Schedule

- Two year schedule, completed in FY 2015/2016
- Six tasks
  - Task 1: Scoping is complete
  - Task 2: Model construction is ongoing
  - Task 3: Develop water balance has started
  - Task 4: Calibrate model
  - Task 5: Run model simulations
  - Task 6: Reporting
Progress and Ongoing Work

- Model grid
- Surface water model setup
- Model layering
- Estimating non-municipal water use
Extent of Active Cells
Identify watersheds
Develop grid
Map DEM to grid
Map streams
Adjust streams
Estimating Non-Municipal Water Use

- **Agricultural crop water use**
  - \( ET = (ET_o) \times \text{(crop factor)} \)
  - Crop water use factors derived from PVWMA model
  - Reference evapotranspiration (\( ET_o \)) provided by USGS
Estimating Non-Municipal Water Use

- Private well water use
  - Building footprints provided by Santa Cruz County
  - Identify dwellings outside water district boundaries (SqCWD, CWD, City, Watsonville)
  - Use only primary dwellings
  - Assign a fixed acre-foot per dwelling rate
Estimating Non-Municipal Water Use

- Small water systems
  - Use recorded water use data where available
  - Use same rate applied to private dwellings where no water use data are available
Model Technical Advisory Group

- Convene soon
  - Dr. Andy Fisher
  - Dr. Bruce Daniels
  - Brian Lockwood
  - ... Surface water expert
  - ... Additional groundwater modeler
Upcoming Deliverables

- PRMS input data memorandum – July
- MODFLOW input data memorandum - August
Questions