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**IN THE SUPERIOR COURT OF THE STATE OF ARIZONA
IN AND FOR THE COUNTY OF MARICOPA**

IN RE THE GENERAL ADJUDICATION
OF ALL RIGHTS TO USE WATER IN
THE GILA RIVER SYSTEM AND
SOURCE

W-1 (Salt)
W-2 (Verde)
W-3 (Upper Gila)
W-4 (San Pedro)
(Consolidated)

Contested Case No. W1-103

**ARIZONA DEPARTMENT OF
WATER RESOURCES' MEETING
REPORT**

Assigned to the Hon. Scott Blaney

Referred to Special Master Sherri Zendri

CONTESTED CASE NAME: *In re Subflow Technical Report, San Pedro River Watershed*

DESCRIPTIVE SUMMARY: The Arizona Department of Water Resources (“ADWR” or “The Department”) provides its Meeting Report for the August 29, 2023 meeting.

NUMBER OF PAGES: Three

DATE OF FILING: August 31, 2023

1 As requested in the Minute Entry Order filed July 18, 2022, ADWR scheduled a
2 meeting between the parties and technical experts in this case to discuss progress on the San
3 Pedro River watershed MODFLOW model.¹ The virtual meeting took place on August 29,
4 2023 at 9:30 a.m. ADWR hereby files its Meeting Report summarizing the meeting.

5 During the meeting, ADWR staff gave a presentation regarding progress on the
6 Department's San Pedro River watershed MODFLOW model, which extends from Mexico
7 through the Upper San Pedro groundwater basin to the Narrows north of Benson. The
8 model contains four (4) geologic layers: 1) Floodplain Holocene Alluvium and Pleistocene
9 Alluvium, 2) Upper Basin Fill (sand and gravel), 3) Upper and Lower Basin Fill (silt, clay,
10 siltstone, and mudstone), and 4) Lower Basin Fill, Pre-Basin Fill and Sedimentary Rock.
11 The vertical delineation of the subflow zone, which will be used for depletion calculation
12 purposes,² has been completed using well logs and published reports and has been
13 incorporated into the model. ADWR made the decision to use MODFLOW-USG, as
14 opposed to MODFLOW-NWT, in direct response to feedback from some of the parties
15 during the previous meeting. MODFLOW-USG is very similar to MODFLOW 6, and
16 allows for targeted refinement of the model grid. Previously, ADWR refined the model
17 grid size to ¼ mile by ¼ mile (40 acres). ADWR has now refined the grid along the subflow
18 zone and the adjacent area to 660 ft by 660 ft (10 acres) with the grid size gradually
19 increasing further out from the subflow zone. ADWR will continue to calibrate the transient
20 model. ADWR staff responded to several questions concerning transmissivity assigned to
21 various model layers, methods for establishing evapotranspiration volumes, methods for
22 parameterizing aquifer properties, the potential for further grid refinement in areas around
23 particular wells for depletion testing purposes, how the vertical extent of the subflow zone
24

25 ¹ Minute Entry Order filed July 18, 2022 at 4.


26 ² Minute Entry Order filed February 19, 2020 at 12.

1 was determined, how the model layers compare to the layers previously modeled by the
2 USGS, what package is being used to simulate well pumping, and how ADWR used time
3 steps per stress period. ADWR will issue its report containing its preliminary analysis and
4 example results in December 2023.

5 The original of this meeting report is being filed with the Clerk and a copy is being
6 posted to ADWR's web site at: <https://www.azwater.gov/adjudications>.

7 **DATED** this 31st day of August 2023.

8 ARIZONA DEPARTMENT OF WATER
9 RESOURCES

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11 _____
12 Kimberly R. Parks, Deputy Counsel
13 Karen J. Neilsen, Deputy Counsel


14 **ORIGINAL** of the foregoing sent by
15 first-class mail on August 31, 2023, to:

16 Clerk of the Maricopa Superior Court
17 Attn: Water Case
18 601 W. Jackson Street
19 Phoenix, Arizona 85003

20 **COPIES** of the foregoing sent by
21 first-class mail on August 31, 2023, to:

22 Special Master Sherri Zendri
23 Maricopa County Superior Court
24 Central Court Building
25 201 West Jefferson Street, Suite 3A
26 Phoenix, AZ 85003-2205

27 **COPIES** of the foregoing sent by first-class
28 mail on August 31, 2023 to all parties on the
29 court-approved mailing list for Contested Case
30 No. W1-103.

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