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SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA CLARA

ORIGINAL

ANTELOPE VALLEY) Santa Clara Case No.
GROUNDWATER CASES,) 1-05-CV-049053
) VOLUME I

Deposition of JUNE A. OBERDORFER, Ph.D., at
301 North Lake Avenue, 10th Floor, Pasadena,
California, commencing at 11:02 a.m., Thursday,
November 4, 2010, before Janice Schutzman,
CSR No. 9509.

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1 the state of the aquifer includes.

2 Was that your own independent assessment of
3 what the state of the aquifer means?

4 A. I may have taken that from some of the
5 judge's wording.

11:52AM

6 Q. In the third sentence, you say:

7 "It also includes determining the
8 sustainable yield of the aquifer."

9 What is your understanding of the term
10 "sustainable yield of the aquifer"?

11:53AM

11 A. That amount of water that can safely be
12 taken out so that there aren't significant negative
13 consequences to the basin.

14 Q. What would you describe as significant
15 negative consequences to the basin?

11:53AM

16 A. Falling water levels, wells going dry,
17 excessive pumping lifts, land subsidence,
18 degradation of water quality.

19 Q. After you say it also includes determining
20 the sustainable yield of the aquifer, you also say:

11:54AM

21 "And whether the groundwater basin
22 is in overdraft."

23 Would you describe for me your
24 understanding of what "overdraft" means?

25 A. Overdraft would be when the extractions

11:54AM

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1 it's close to 40 percent -- is just very, very
2 different than what you'd expect in an arid or
3 semi-arid groundwater basin. It's just way too
4 high. That's the sort of fraction you might expect
5 in a place like the Pacific Northwest, where you've 02:11PM
6 got heavy rainfall and gray days and not a lot of
7 sunshine. So it's just unreasonably high.

8 Q. Do you believe it's unreasonable because
9 he's not considering enough evapotranspiration?

10 A. Right, I think he's underestimating 02:11PM
11 probably evapotranspiration.

12 Q. Any other elements of that approach that
13 you have concerns with?

14 A. It's a very simple approach. It's
15 basically precipitation minus evapotranspiration. I 02:11PM
16 think he does include -- I'm trying to remember now.
17 He might include playa flooding, but he's got a very
18 small number, about one-ninth of what Durbin has
19 from what I -- my understanding is they're
20 historical records of playa flooding. But I think 02:12PM
21 that makes a small difference in his answer.

22 Q. So the one major difference would be
23 evapotranspiration?

24 A. I think he's underestimated that.

25 Q. When is the last time that you're aware of 02:12PM

1 that there was significant subsidence anywhere in
2 the Antelope Valley adjudication area?

3 A. You know, it's continuing, so it would
4 depend on what your definition of "significant" is.

5 Most of the subsidence took place, I think, 02:13PM
6 in the '60s and '70s, and it's been tapering off
7 since then.

8 Q. Are you aware of any locations that
9 currently are experiencing subsidence?

10 A. I don't think I've seen any data since the 02:13PM
11 '90s since USGS looked up through that period. So
12 for the last 10 or 15 years, I haven't seen -- they
13 did some, I think, Lidar studies, so radar studies,
14 but that was looking more at short term, sort of
15 seasonal subsidence in response to pumping, not long 02:13PM
16 term.

17 Q. When you say "they," who do you mean?

18 A. USGS, I think.

19 Q. In the work that you've done at the Air
20 Force Base, have you observed any recent 02:13PM
21 subsidence --

22 A. Haven't --

23 Q. -- say within the past 10 years?

24 A. I haven't really worked down in that area,
25 so no. 02:14PM

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"Ongoing pumping in excess of sustainable yield has resulted in ongoing declining groundwater levels and associated ongoing depletion of groundwater storage by an average of more than 50,000 acre feet per year over the last 10 years."

03:02PM

Can you explain to me why the first hash says 40,000 acre feet per year over the last decade but the second hash says an average of more than 50,000 acre feet per year over the last 10 years?

03:02PM

A. I don't know. Let me read that again more carefully.

Q. Sure. Sure. Take your time.

A. No, I don't know the answer to that. I would assume they should both be around 40- to 45,000.

03:03PM

Q. And then just on the V-2, the last sentence says:

"The most damaging effects of the historical land subsidence have been the occurrence of ground fissures in areas of differential land subsidence, e.g., at Edwards Air Force Base."

03:03PM

To your knowledge, when was the last time

03:04PM

1 that ground fissures in areas of differential land
2 subsidence were observed at Edwards Air Force Base?

3 A. I think it was the late 1990s. But it
4 could have been the mid 1990s. I don't know.

5 MR. SLOAN: Okay. I have no more 03:04PM
6 questions.

7 MR. BUNN: I may have a clarifying question
8 or two, but could I take a minute first? Could we
9 have a little break?

10 MR. SLOAN: Sure.

11 (Recess taken.)

12 MR. BUNN: I don't have any questions.

13 MR. MILIBAND: I think I might just have 10
14 minutes' worth.

15
16 EXAMINATION

17 BY MR. MILIBAND:

18 Q. Good afternoon, Doctor. My name is Wes
19 Miliband. I represent Phelan Pinon Hills Community
20 Services District. 03:14PM

21 Now, for simplicity purposes, I might refer
22 to Phelan Pinon Hills Community Services District
23 simply as Phelan.

24 Is that okay with you, Doctor?

25 A. Okay. 03:14PM