

**Second Declaration Of Denise M. Hulett In
Support Of Plaintiffs' Motion For Enforcement**

EXHIBIT 2

**The Expected Representation of Hispanics
in Selected Occupations in Region 5:
A Fourth Analysis**

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I. Introduction

1. I am a labor economist who submitted three previous reports in this case, entitled *The Expected Representation of Hispanics in Selected Occupations in Region 5: Updated Estimates Based on the 2000 Census*, May 2005 (“*First Bendick Report*”), *The Expected Representation of Hispanics in Occupational Series 462, Forestry Technician*, June 2005 (“*Second Bendick Report*”), and *The Expected Representation of Hispanics in Selected Occupations in Region 5: Further Analyses and Alternative Estimates*, January 2006 (“*Third Bendick Report*”).

2. Since that time, defendants have filed a new expert report addressing subjects discussed in my previous analyses: *Declaration of Christopher Erath, Ph.D.*, dated December 1, 2006 (“*Erath Report*”). This, my fourth report, responds to selected analyses presented in the *Erath Report*. I also present a new estimate of the expected representation of Hispanics in Series 462 based on the 2000 Census with adjustments ordered by the Court.

II. Adjusting for Citizenship and Language Proficiency

3. The *Settlement Agreement* in this case directed that, when data from the 2000 Census became available, the expected representation of Hispanics in various job titles in Region 5 should be updated from the 1990 Census data used in the *Settlement Agreement* itself. This update was the assignment I tackled in my *First Bendick Report*, and I performed it using weighted averages of 2000 Census occupations which together correspond to the 1990 Census occupations used in the *Settlement Agreement*. Specifically, for Series GS 462, “Forestry Technicians,” the *Settlement Agreement*

specified that the corresponding 1990 Census occupation was Occupation 495, “Forestry Worker, Except Logging.” The Census Bureau’s “crosswalk” between the 1990 and 2000 Censuses then showed that three 2000 Census occupations needed to be weighted together to correspond to that 1990 occupation:

Census Occupation Number	Census Occupation Title	Weight (% of the 1990 Occupation Represented by this 2000 Occupation)	% Hispanic
612	Forest & Conservation Workers	71.7%	41.2%
196	Misc. Life. Physical & Social Science Technicians	27.6%	14.9%
021	Farmers & Ranchers	0.7%	21.3%
Weighted Average of the 3		100.0%	33.8%

Accordingly, my *First Bendick Report* concluded that the expected representation of Hispanics in Series 462, updated using the 2000 Census, was 33.8%.¹

4. In deriving this 33.8% figure, I interpreted the *Settlement Agreement* to direct that the *only* adjustment that should be made to expected representation figures presented in the *Settlement Agreement* would be to update 1990 Census data to 2000 Census data. However, in January 2006, defendant’s expert Dr. Claudia Gonzalez Martinez proposed that the 2000 Census figures for expected Hispanic representation should be further adjusted for U.S. citizenship and English language proficiency. In an

¹ *First Bendick Report* (May 2005), Exhibit A, row 20, column (k). My *Second Bendick Report* (June 2005) provided additional analysis supporting the correctness of this “weighted average” approach.

Order dated March 30, 2006, the Court directed that these two adjustments be applied to the 462 Series.²

5. Unfortunately, the particular method for making these two adjustments presented by Dr. Martinez was not consistent with my proposal for matching occupations between the two Censuses.³ Because the Court adopted my proposed method for matching occupations and further directed that the citizenship and language proficiency adjustments be made, I have revisited the 2000 Census data to derive a correct, consistent estimate of Hispanic representation in Series 462 incorporating these two adjustments.

6. Specifically, I used the 2000 Census' Public Use Microdata Sample ("PUMS") to tabulate the percent Hispanic among persons with the following six characteristics:

- a. They are residents of California;
- b. They are in the Civilian Labor Force;
- c. Their usual occupation is one of the three 2000 Census occupations the Census Bureau crosswalk identifies as corresponding to the 1990 Census occupation representing Series 462 in the *Settlement Agreement*;
- d. They have no work-limiting disability;
- e. They are U.S. citizens; and

Order Denying Defendant's Motion for Entry of Order that Defendants Have Discharged their Obligation Under the Settlement Agreement, and Granting in Part and Denying in Part Plaintiffs' Motion for Contempt and for Enforcement of Court-Approved Settlement Agreement, March 30, 2006, page 16.

³ This issue is discussed by defendant's new expert, Dr. Erath, in paragraphs 29 and 30 of the *Erath Report*. While he describes it as an "error" committed by me, in fact I had simply applied Dr. Martinez's proposed adjustments to my occupational figures. Accordingly, the issue is not appropriately described as an "error" on anyone's part but instead as yet another aspect of the continuing disagreement about which 2000 Census occupations correspond to 1990 Census occupations.

f. They speak English with sufficient proficiency to enter Series 462.⁴

7. The results of this tabulation are as follows:

Census Occupation Number	Census Occupation Title	Weight (% of 1990 Occupation Represented by this 2000 Occupation)	% Hispanic
612	Forest & Conservation Workers	71.7%	9.0%
196	Misc. Life, Physical & Social Science Technicians	27.6%	14.5%
021	Farmers & Ranchers	0.7%	20.0%
Weighted Average of the 3		100.0%	18.4%

Accordingly, I conclude that the expected representation of Hispanics in Series 462, updated using the 2000 Census and adding a citizenship and English proficiency adjustment, is 18.4%.

III. Other Adjustments Proposed by Dr. Erath

8. Dr. Erath proposes that three further adjustments be made to 2000 Census data in estimating Hispanic representation in Series 462:

a. He proposes to add an educational requirement.

⁴ In the 2000 Census, each individual is recorded as either:

- (1) a monolingual English speaker
- or a speaker of one or more non-English languages who
- (2) speaks English very well;
- (3) speaks English well;
- (4) speaks English not well; or
- (5) speaks English not at all.

In my analysis, I count a person as having sufficient proficiency to enter Series 462 if they fell into categories (1) through (3). This appears to be the same definition Dr. Erath applied (*Erath Report*, paragraph 27).

b. He proposes to analyze what he claims to be local labor markets, rather than the California-wide labor market. And

c. He proposes to split the 462 series between positions in grades 6 and below and those in grades 7 and above.

9. I have not included any of these adjustments in deriving the estimate in paragraph 7 above. The primary reason for not doing so is that, in explicitly ordering adjustments to the GS-462 Census 2000 figures for U.S. Citizenship and English proficiency and not enumerating any other adjustments, I assumed that the Court intended that *only* these two adjustments be made.

10. A second reason I did not make any of Dr. Erath's proposed adjustments is that, if it were deemed appropriate to consider further adjustments to the Census 2000 data, Dr. Erath's three proposals do not exhaust the adjustments which should be considered. For example, Census data might also be adjusted for age,⁵ part-time work status, gender, and job applicants from outside California.⁶ In addition, consideration should be given to basing expected representation not on a few enumerated occupations but instead a broader range of worker backgrounds, such as all blue collar workers. Proper consideration of all these options, including those raised by Dr. Erath, would require substantial additional analytical work and additional discovery beyond what has been completed to date by either plaintiffs or defendants.

⁵ In particular, it is my understanding that jobs within Series 462 which are considered "primary" limit hiring to persons no older than 37.

⁶ Reviewing the application data recently provided by defendant, I observed multiple applications from persons currently residing in the adjacent states of Oregon, Nevada, and Arizona, as well as several dozen other states across the nation.

11. A third reason for not making Dr. Erath's three proposed adjustments is that I do not presently have sufficient data to determine whether Dr. Erath has correctly computed these adjustments. In particular:

- a. With respect to an education requirement, it appears that for many positions within GS-462, the primary prerequisite for hiring is relevant experience, with education entering into consideration only as a partial substitute for experience. If this circumstance is widespread with Series 462, then Dr. Erath's focus on minimum educational prerequisites for hiring (such as "must have a high school diploma") is inappropriate.⁷ Further analysis and further discovery beyond what has been completed to date by either plaintiffs or defendants would be required to determine the proportion of jobs to which educational prerequisites of any kind actually apply, and what those prerequisites are.
- b. With respect to substituting local labor markets for a California-wide market, Dr. Erath has provided essentially no evidence that hiring into Series 462 is exclusively or even predominantly local.⁸ The accurate way

⁷ See paragraphs 32 and 34 of the *Erath Report*. In paragraph 33 of his report, Dr. Erath states that "...experience is a partial substitute for education." However, job descriptions I have read for positions in Series 462 state that education is a substitute for experience -- precisely the reverse of Dr. Erath's statement. Particularly since the mix of jobs within the 462 series is currently unknown to me, further analysis and further discovery would be required to determine the extent to which each statement applies, and only then could a meaningful educational adjustment be computed.

⁸ Paragraphs 40 and 41 of the *Erath Report* argue that if there is a high correlation between the Hispanic representation in a local labor market and the Hispanic representation in Forest Service, that proves that hiring is predominantly local. This conclusion is a blatant *non sequitur*. Consider, for example, a law firm in which 30% of the attorneys are Asian, located in a city in which 30% of the general work force is Asian. Superficially, the two figures seem related. Yet the match of the two figures could be observed even if *not even one* of the firm's Asian attorneys had been hired locally.

to determine the extent to which hiring is local would be to tabulate home addresses of Forest Service job applicants as of the time of their application. Such tabulations would require further analysis and further discovery beyond what has been completed to date by either plaintiffs or defendants.

- c. With respect to dividing the 462 series into two “levels” -- GS-6 and below versus GS-7 and above -- Dr. Erath provides no rationale for picking this particular dividing line and no evidence that there is more similarity among positions above and below the line than among all 462 Series jobs taken together.⁹ Repeated statements in the *Erath Report* that I have proposed or endorsed such a split¹⁰ are a blatant misrepresentation of my prior testimony and my current opinion. To determine whether such a split would be appropriate, and if so, where it should be made, would require investigation of the specific occupations at each grade level and the career path to which they belong. Such an analysis would require further analysis and further discovery beyond what has been completed to date by either plaintiffs or defendants.

⁹ For example, it is likely that some GS-7 positions are occupied by persons supervising employees of grades GS-6 and below who have been promoted to GS-7 from those lower grades and whose skills and characteristics resemble those of the persons they supervise. Concurrently, other GS-7 employees may be employed in more technical positions, to which they bring more extensive education and different skills from their GS-7 colleagues. Such circumstances would argue against dividing the 462 Series by level with all GS-7 positions on the same side of the dividing line, as Dr. Erath proposes.

¹⁰ For example, paragraph 13 of the *Erath Report* incorrectly states that I have agreed that Series 462 positions at grades GS-7 should be matched to one Census occupational code, while those at GS-6 and lower should be matched to a different Census occupation code. The report repeats this incorrect description of my position in its paragraph 15, paragraph 21, paragraph 22, paragraph 25, paragraph 30, and paragraph 45.

12. Paragraphs 56 and 57 of the *Erath Report* conclude that the expected representation of Hispanics among employees in Series 462 in Region 5 is 13.1% without an education adjustment and 9.8% with an education adjustment. Because these figures apply adjustments which I do not believe are appropriate and apply those adjustments in ways which may be incorrect, I conclude that these figures should not be relied upon for any present purpose. The best available estimate of the expected Hispanic representation in Series 462 in Region 5 based on 2000 Census data with the adjustments for citizenship and language proficiency mandated by the Court is 18.4%, as stated in paragraph 7 above.

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Date: December 21, 2006


Marc Bendick, Jr., Ph.D.