# No. 142, Original

#### In the

# Supreme Court of the United States

### STATE OF FLORIDA,

Plaintiff,

V.

### STATE OF GEORGIA,

Defendant.

# Before the Special Master

Hon. Ralph I. Lancaster

I, David "Woody" Hicks, being duly sworn, depose and state as follows:

- 1. I am currently retired, and formerly was employed by the Joseph W. Jones Ecological Research Center at Ichauway ("Jones Center") and the United States Geological Survey.
- 2. My address is: 1512 Grand Cypress Lane, Albany, GA 31701.
- 3. I am over the age of eighteen and I am not a party to this action.
- 4. I have the authority to make the certifications and statements contained herein.
- 5. Attached hereto as **Exhibit A** is a true and correct copy of an email chain that includes a true and correct copy of an email, subject name "Pending Drought," that I sent to Richard Royal, Mark Masters, and Doug Wilson on January 24, 2011 at 10:54 A.M. GA01048557.
- 6. Attached hereto as **Exhibit B** is a true and correct copy of a slide deck prepared by me. I presented this slide deck at the November 21, 2014 Georgia Environmental Protection Division's Stakeholders Meeting held in Newton, GA, at the Joseph W. Jones Ecological Research Center. The Presentation is

entitled "Water Resources and Security Issues in the Flint River Basin." Dr. Lindsay Boring, director of the Jones Center, asked me to give this presentation. GA00278813.

# a. Photographs:

#### i. GA00278827

- I have provided to counsel of the State of Florida a copy of the original photograph on this page entitled "USGS Gaging Station."
- 2. I viewed the images in the photograph with the caption "USGS Gaging Station" included on GA00278827 on March 2, 2016.
- I recognize the scene that is depicted in the images in the photograph with the caption "USGS Gaging Station" included on GA00278827.
- 4. The images in the photograph with the caption "USGS Gaging Station" included on GA00278827 depict the scene on Chickasawhatchee Creek at Elmodel, near the USGS gage and the Ga highway 37 bridge crossing.
- 5. The photograph with the caption "USGS Gaging Station" included on GA00278827 was taken at a section of Chickasawhatchee Creek at the USGS gaging station at Elmodel, GA and the bridge at GA highway 37.
- 6. The photograph with the caption "USGS Gaging Station" included on GA00278827 was taken by Dr. Stephen Golladay at approximately 2-3 pm on October 4, 2011.
- I was not present at Chickasawhatchee Creek at Elmodel on October 4, 2011 at 2-3pm when the photograph with the caption "USGS Gaging Station" included on GA00278827 was taken.

### ii. GA00278828

- I have provided to counsel of the State of Florida a copy of the original photograph on this page entitled "USGS Gaging Station."
- 2. I viewed the images in the photograph with the caption "October 2007" included on GA00278828 on March 2, 2016.
- I recognize the scene that is depicted in the images in the photograph with the caption "October 2007" included on GA00278828.
- 4. The images in the photograph with the caption "October 2007" included on GA00278828 depict the scene on Spring Creek south of Colquitt, GA, Miller County, looking downstream from the bridge crossing of Lanes Bridge Road on October 5, 2007 at an uncertain time of day.
- 5. The photograph with the caption "October 2007" included on GA00278828 was taken by Dr. James Kundell, UGA (retired), at a section of. Spring Creek south of Colquitt, GA, Miller County, looking downstream from the bridge crossing of Lanes Bridge Road on October 5, 2007 at an uncertain time of day.

### iii. GA00278837

- I have provided to counsel of the State of Florida a copy of the original photographs on this page entitled "Zero Flow," "Loss of Shoals," and "Isolated Pools."
- I viewed the images in the photographs with the captions "Zero Flow," "Loss of Shoals," and "Isolated Pools" included on GA00278837 on March 2, 2016.

- 3. I recognize the scenes that are depicted in the images in the photographs with the captions "Zero Flow," "Loss of Shoals," and "Isolated Pools" included on GA00278837.
- 4. The images in the photographs with the captions "Zero Flow," "Loss of Shoals," and "Isolated Pools" included on GA00278837 depict the scenes on Chickasawhatchee Creek at Elmodel, near the USGS gage and the Ga highway 37 bridge crossing.
- 5. The photographs with the captions "Zero Flow," "Loss of Shoals," and "Isolated Pools" included on GA00278837 were taken at a section of Chickasawhatchee Creek at Elmodel, about 200 meters upstream from the USGS gage and the Ga highway 37 bridge crossing.
- 6. The photograph with the captions "Zero Flow," "Loss of Shoals," and "Isolated Pools" included on GA00278837 were taken at approximately 2-3pm.
- 7. Attached hereto as Exhibit C is an email chain that includes a true and correct copy of:
  - a. An email, subject name "Fwd: Water Demands Report Approval," that I received from Mark Masters on February 28, 2013 at 9:20 P.M. See GA02383913 15.
  - b. An email, subject name "Fwd: Water Demands Report Approval," that I sent to Dan Tonsmeire and Mark Masters on March 2, 2013 at 11:09 A.M. See GA02383913.
  - c. An email, subject name "RE: Water Demands Report Approval," that I received from Dan Tonsmeire on March 2, 2013 at 3:02 P.M. See GA02383912 13.
  - d. An email that I received from Bradford Moore on March 13, 2013 at 11:13 P.M. See GA02383911.

- e. An email, subject name "Re: Water Demands Report Approval," that I sent to Bradford Moore on March 14, 2013 at 7:49 P.M. See GA02383911.
- 8. Attached hereto as Exhibit D and Exhibit D1 are true and correct copies of Impacts of Agricultural Pumping on Selected Streams in Southwestern Georgia (October 29, 2009), a paper that I co-authored. JWJONES0000048.
- 9. Attached hereto as **Exhibit E** is a true and correct copy of Stream flow changes associated with water use and climatic variation in the lower Flint River Basin, southwest Georgia (2007), a paper that I co-authored. JWJONES0000427.
- 10. Attached hereto as Exhibit F is a true and correct copy of Effects of irrigation withdrawals on streamflows in a karst environment: lower Flint River Basin, Georgia, USA (2012), a paper that I co-authored. JWJONES0000541.
- 11. Attached hereto as **Exhibit G** is a true and correct copy of the abstract of *Indicators of Long Term Hydrologic Change in the Flint River (2013)* that I coauthored. JWJONES0000397.
- 12. Attached hereto as **Exhibit H** is a true and correct copy of a slide deck, *Indicators* of Long Term Hydrologic Change in the Flint River (2013), which I co-authored. The presentation is accessible at:

  http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0a
  hUKEwikda07PrKAhUKbj4KHRTcDzgQFggkMAE&url=http%3A%2F%2Fww
  w.drought.gov%2Fimageserver%2FNIDIS%2Fworkshops%2Facf\_middle\_chatt\_
  and\_flint\_may\_2010%2Fpresentations%2FGolladay\_NOAA-NIDIS\_May18XPversion.ppt&usg=AFQjCNEYtyoFxIvtjwTRU7N1WyaaP2POg&sig2=VgJ09JrUTnJeAcvwzHd1QA
- 13. Attached hereto as **Exhibit I** is a true and correct copy of *Stream Habitat and Mussel Populations Adjacent to AAWCM Sites in the Lower Flint River Basin:*Project Report (October 10, 2014), a paper that I co-authored.

  JWJONES0000678.
- 14. Attached hereto as **Exhibit J** is a true and correct copy of *Effects of land-use on groundwater quality in springs of the upper floridan aquifer* (2009), a paper that I co-authored. JWJONES0000241.

- 15. Attached hereto as **Exhibit K** is a true and correct copy of *Water monitoring* network in the Chickasawhatchee Swamp, Southwest Georgia (2003), a paper that I co-authored. JWJONES0000351.
- 16. Attached hereto as **Exhibit L** is a true and correct copy of *Assessment of stream habitat in the Flint River Basin (March 2006)*, a paper that I co-authored. JWJONES0000762.
- 17. Attached hereto as **Exhibit M** is a true and correct copy of *Use of historic data to evaluate effects of pumping stress on streams in southwest Georgia (2009)*, a paper that I co-authored. JWJONES0000557.
- 18. Attached hereto as **Exhibit N** is a true and correct copy of *Mussel population* surveys and estimation of potential stream withdrawals at selected sites in the Lower Flint River Basin (June 2003), a paper that I co-authored. JWJONES0000597.
- 19. Attached hereto as **Exhibit O** is a true and correct copy of Distribution of Permitted Agricultural Water Use and Water Availability in the Flint River Basin, Southwestern Georgia (2001), a draft study prepared for the Flint River Water Planning and Policy Center, in which I participated as a hydrogeologist. GA00814503.
- 20. Attached hereto as **Exhibit P** is a true and correct copy of *Using Sustainable Boundary Approach (SBA) to assess and develop flow guidelines: The Flint River, Georgia (2015)*, a paper that I co-authored. This paper is accessible at http://gwri.gatech.edu/sites/default/files/files/docs/2015/6.4.3golladay.pdf.
- 21. Attached hereto as **Exhibit Q** is a true and correct copy of *The Natural History of the Flint River*, an article that I co-authored. This article is accessible at http://www.sherpaguides.com/georgia/flint\_river/natural\_history/.
- 22. Attached hereto as **Exhibit R** is an email chain that includes a true and correct copy of: An email, subject name "Flint Model," that I sent to Robert R. Osborne and Mark Masters on March 29, 2013 at 9:01 AM.
- 23. Attached hereto as **Exhibit S** is an email chain that includes a true and correct copy of:

- a. An email that was forwarded from Brad Moore on November 9, 2012 at 3:58 PM. See GA02383135
- b. An email I sent to Brad Moore on November 12, 2012 at 6:19 PM. See GA02383135.
- c. An email, subject name "UIF Report Conclusions," that I received from Kristin Rowles on November 12, 2012 at 9:21 PM. See GA02383135.
- 24. Attached hereto as **Exhibit T** is an email chain that includes a true and correct copy of:
  - a. An email, subject name "Feedback on UIF from USFWS Meeting," that I received from Brad Moore on December 1, 2012 at 8:56 AM. See
     AR 0271132 33.
  - b. An email I received from Gordon Rogers on December 1, 2012 at 3:54
     PM. See AR 0271131 32.
  - c. An email, subject name "Re: FW: Feedback on UIF from USFWS Meeting," that I sent to Gordon Rogers, Laura Hartt, Dan Tonsmeire, and Sally Bethea on December 1, 2012 at 6:28 PM. See AR 0271131.
- 25. Attached hereto as **Exhibit U** is an email chain that includes a true and correct copy of:
  - a. An email, subject name "acfs," that I sent to Mark Masters, on September 22, 2014 at 1:42 PM. See GA02387220.
  - b. An email I received from Mark Masters in reply on September 22, 2014 at 2:02 PM. See GA02387220.
  - c. An email, subject name "Re: acfs," that I sent to Mark Masters on September 22, 2014 at 2:12 PM.
- 26. Attached hereto as **Exhibit V** is true and correct copy of an email, subject name "ACR Comments on UIF Report," that I received from Aris Georgakakos on September 17, 2014 at 4:22 PM.
- 27. Attached hereto as **Exhibit X** is an email chain that includes a true and correct copy of:

- a. An email, subject name "Lower Flint Drought Flows," that I received from Gordon Rogers on October 2, 2014 at 3:46 PM. See GA02387405 – 07.
- b. An email that I received from Dan Tonsmeire on October 15, 2014 at 12:57 PM. GA02387405.
- c. An email, subject name "Re: Lower Flint Drought Flows," that I sent to Dan Tonsmeire, Laura Hartt, and the ACF Stakeholders Administrator email account on October 15, 2014 at 1:25 PM. See GA02387404.
- d. An email in reply that I received from Gordon Rogers on October 15, 2014 at 2:13 PM. GA02387402.
- e. An email, subject name "Re: Lower Flint Drought Flows," that I sent to Gordon Rogers, Laura Hartt, and the ACF Stakeholders Administrator email on October 15, 2014 at 3:36 PM. See GA02387400 02.
- 28. Attached hereto as **Exhibit Z** is an email chain that includes a true and correct copy of:
  - a. An email, subject name "RE: Water Demands Report Approval" that I received from Dan Tonsmeire on March 2, 2013 at 3:02 PM. See
     AR 0274501 03.
- 29. Attached hereto as **Exhibit BB** is an email chain that includes a true and correct copy of:
  - a. An email I received from Lisa Cowart on January 7, 2014 at 2:34 PM. See GA02392712.
  - b. An email I sent to Lisa Cowart on January 7, 2014 at 2:41 PM. See GA02392712.
  - c. An email I received from Lisa Cowart in January 7, 2014 at 2:50 PM. See GA02392712.
  - d. An email I sent to Lisa Cowart on January 8, 2014 at 11:19 AM. See GA02392712.
  - e. An email I received from Lisa Cowart on January 8, 2014 at 12:25 PM. See GA02392712.

- f. An email I sent to Lisa Cowart on January 9, 2014 at 9:20 PM. See GA02392711.
- g. An email I received from Lisa Cowart on January 10, 2014 at 8:19 AM. See GA02392711.
- h. An email I received from Lisa Cowart on January 10, 2014 at 12:15 PM. See GA02392711.
- i. An email, subject name "Re: presentation information," that I sent to Lisa Cowart on January 10, 2014 at 12:35 PM.
- j. An email, subject name "Fwd: presentation information," that I forwarded to Mark Masters, Cliff Lewis and Lisa Cowart on January 10, 2014 at 12:42 PM.
- 30. Attached hereto as **Exhibit CC** is a true and correct copy of an article entitled Crop Data Prepares Drought-Stricken Farmers to get by with Less, dated August 7, 2012 where I was accurately quoted. This article can be accessed at http://www.motherjones.com/blue-marble/2012/08/us-drought-crop-data-farmers.
- 31. Attached hereto as **Exhibit DD** is a true and correct copy of an article entitled Stakeholders' proposals might settle tri-state 'Water Wars' dispute out of court, dated May 18, 2015, where I was not accurately quoted. This article can be accessed at http://www.albanyherald.com/news/stakeholders-proposals-might-settle-tri-state-water-wars-disputeout/article\_a242aec1-043f-51fc-86fb-3476a6e4d447.html.
- 32. Attached hereto as **Exhibit EE** is a true and correct copy of an article entitled Water plan based on false projections, hydrologist says dated July 29, 2014, where I was not accurately quoted. The article can be accessed at http://www.moultrieobserver.com/news/local\_news/article\_72259ee1-3ad8-50bd-980d-61/.
- 33. Attached hereto as **Exhibit FF** is a true and correct copy of an article entitled *River advocates oppose Flint reservoir expansion* dated December 1, 2008 and updated December 4, 2008 where I was accurately quoted. The article can be accessed at <a href="http://www.walb.com/story/9439138/river-advocates-oppose-flint-reservoir-expansion">http://www.walb.com/story/9439138/river-advocates-oppose-flint-reservoir-expansion</a>.

34. Attached hereto as **Exhibit GG** is a true and correct copy of an article titled *Whose Water Is It?* dated January 7, 2004 where I was accurately quoted, but in which my statement was taken out of context. The article can be accessed at http://klamathbucketbrigade.org/AgWeb\_WhoseWat erIsIt\_Fairchild022105.htm.

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct.

Executed this 3rd day of March, 2016 at, 12:03 fm

(Signature of Declarant)

David W. Hicks
(Name of Declarant)

(229) 395 9677 (Telephone Number)