

State of Louisiana

DEPARTMENT OF JUSTICE P.O. BOX 94005 BATON ROUGE 70804-9005

December 3, 2015

VIA CERTIFIED MAIL

Mr. Ken Brazil State Water Planning Section Water Resources Management Division Arkansas Natural Resources Commission 101 East Capitol, Suite 350 Little Rock, Arkansas 72201

Re: Request for denial of permit applications for interstate transfers of water from the Mississippi River and its tributaries

Dear Mr. Brazil:

Our office writes you to assert the State of Louisiana's concern over and objection to the Application for Non-Riparian Water Use, submitted by BWG Corp. ("BWG"), and received by the Commission ("ANRC") on August 20, 2014, which requests permission to transfer via pipeline "750+ million gallons per day of water from the Mississippi River, across south Arkansas to be sold and delivered to municipalities in north Texas... continuously for up to 75+ years."

On behalf of the natural resource agencies of the State of Louisiana that offered comments through the attached correspondence, we thank the State of Arkansas for its comity and consideration as it reviews this permit application. For the reasons enumerated by the natural resource agencies of the State of Louisiana in their attached correspondence, as well as those listed below, we urge the ANRC to oppose and the Arkansas General Assembly to deny BWG's permit application. Further, we urge the same for any other applications for interstate transfers of surface water from the Mississippi River Basin ("MRB") at least until Louisiana, Mississippi, Tennessee, Arkansas, and federal stakeholders have developed and reconciled their current and future water budgets and all individual and cumulative adverse impacts of such water transfers have been identified and resolved.

As the ANRC's September 2015 Status Report to Interagency and Interstate Workgroups on BWG's Non-Riparian Permit Application for Interstate Water Transfer acknowledges, "[t]he accounting method and excess surface water quantification should recognize any downstream states' needs from the MRB." The State of Louisiana welcomes and encourages immediate and ongoing coordination and dialogue with ANRC and other state and federal stakeholders to develop a comprehensive water budget and management strategy for the MRB, as contemplated in the Status Report.

James D. "Buddy" Caldwell attorney general Mr. Ken Brazil, ANRC Re: Request for Permit Denial Page 2 of 3

As part of this dialogue, we note that the water resources of Louisiana are a public benefit of incalculable value for the people, environment, and economy of the State. The proper management of these resources is a critical responsibility of the State and its agencies under the Constitution, which requires that, "[t]he natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people." Such proper management of water resources requires science-based monitoring and planning as well as interstate cooperation.

Louisiana is currently developing a comprehensive water budget and plan. In its March 2012 report to the State Legislature, the Louisiana Water Resources Commission identified the "need for the state's current water management efforts to evolve into a more robust, comprehensive plan." Pursuant to this finding, the Louisiana Department of Natural Resources has proceeded to develop a sustainability assessment and planning framework that will serve as a preliminary step in addressing Louisiana's current and future water resources management issues. An initial report, providing a blueprint for future planning to manage the State's water resources for long-term sustainability, is scheduled to be available in spring 2016. While this will be an important milestone, a significant amount of additional work will be needed before the State completes its comprehensive, long-term water budget and water plan.

A comprehensive water budget for the MRB must necessarily begin with the needs of the coast. Coastal Louisiana is experiencing unprecedented land loss, and the State is implementing a bold plan to curb, if not reverse, this loss. Critical to this effort, as noted in the letter from the Louisiana Coastal Protection and Restoration Authority, is the replumbing of the Mississippi River through fresh water and sediment diversion projects. As the letters from the State's natural resource agencies explain in greater detail, river flows near the coast also directly impact the river's ability to supply Greater New Orleans with its drinking water, maintain critical navigation channels and infrastructure, and habitat for fish and wildlife. The State of Louisiana also stresses the importance of incorporating the hard-to-measure impacts of sea level rise, increased occurrence of drought, and hydrologically connected aquifers into the planning water budget analysis of the MRB.

In addition to the study of adverse impacts near the coast, adverse impacts upriver and to the receiving watershed(s) must be fully understood. Before any permit to transfer water out of the MRB is granted, all potential adverse effects, including cumulative effects, must be identified and addressed. We note that, despite longstanding interest from Texas investors in water from the Sabine River, the Sabine River Authority of Louisiana has resisted capitulating to these interests, and in 2012 it suspended the consideration of out-of-state water sales until the State completes a statewide comprehensive water plan.

For the reasons indicated above, the State of Louisiana requests that the State of Arkansas deny or indefinitely suspend any and all permit applications for out-of-state transfers of surface water on the Mississippi River Basin or groundwater from its alluvial aquifers, at least until such time that Louisiana and other affected states and federal stakeholders have developed and reconciled their respective water budgets and plans for this river system. While Louisiana looks forward to working collaboratively to develop these budgets and plans, nothing in this letter shall waive the Mr. Ken Brazil, ANRC Re: Request for Permit Denial Page 3 of 3

State's right to seek all remedies prescribed by law, including injunctive relief and apportionment, should Louisiana be injured from the upriver diversion of water from the Mississippi River Basin.

Should you have any questions regarding this matter, please do not hesitate to contact us at <u>vorhoffh@ag.state.la.us</u>, <u>seidemannr@ag.state.la.us</u>, or <u>kempd@ag.state.la.us</u>, or via telephone at (225) 326-6085.

With best regards, we are,

Very truly yours,

JAMES D. "BUDDY" CALDWELL ATTORNEY GENERAL

By:

Harry J. Vorhoff Duncan S. Kemp, IV Ryan M. Seidemann Assistant Attorneys General

JDC/HJV/tp

cc:

Sen. Jonathan Dismang President Pro Tempore Arkansas Senate 500 Woodlane St., Ste 320 Little Rock, AR 72201

Rep. Jon Eubanks Speaker Pro Tempore Arkansas House of Representatives 500 Woodland St., Ste 350 Little Rock, AR 72201

Mr. J. Randy Young, P.E. Executive Director Arkansas Natural Resources Commission 101 East Capitol, Suite 350 Little Rock, Arkansas 72201 La. Dept. of Environmental Quality

La. Dept. of Wildlife & Fisheries

La. Dept. of Natural Resources

La. Dept. of Health & Hospitals, Office of Public Health

La. Coastal Protection & Restoration Authority

Sabine River Authority of Louisiana

La. Dept. of Transportation & Development

La. Water Resources Commission

Water Code Committee of the Louisiana Law Institute



State of Louisiana

BOBBY JINDAL GOVERNOR

November 24, 2015

Mr. Kenneth W. Brazil, P.E. Arkansas Natural Resources Commission 101 E. Capitol, Suite 350 Little Rock, AR 72201

Dear Mr. Brazil,

The Louisiana Coastal Protection and Restoration Authority (CPRA) has reviewed the information provided by the Arkansas Natural Resources Commission regarding the non-riparian permit application in which the BWG Corporation proposes to remove water from the Mississippi River for "up to 75+ years" and transport it via pipeline to Texas. CPRA appreciates the opportunity to participate in this permit review process and offers the following comments.

CPRA understands this is a complicated matter involving the water rights/usage policies of multiple States and the Federal government, including some issues that may not be well defined. There are also potential issues regarding water quality, impacts to threatened and endangered species, and impacts to downstream hydrology and ecology. The CPRA's mandate is to develop, implement, and enforce a comprehensive coastal protection and restoration Master Plan. One of the most important elements of this Master Plan is the initiative to make full use of the water and sediment resources provided by the Mississippi River to fulfill our mandate.

The proposed action would remove 750 million gallons of water per day from the Mississippi River, along with some undetermined amount of sediment. This volume is around 1-0.05% of the total daily volume conveyed past the proposed withdrawal point under low and high flow conditions, respectively. A withdrawal of this magnitude is within the error of measurement for techniques currently used to observe flow in the river and below the resolution of the hydrodynamic models used to assess downstream impacts of water and sediment withdrawal/diversion. It is not currently possible to investigate the magnitude of potential impacts of this specific proposed activity on Mississippi River water and sediment resources available for coastal restoration projects in Louisiana.

A single action of this magnitude on the Mississippi River may result in an unquantifiable, very small negative impact to available sediment and water resources; more projects of this magnitude (or larger) may cumulatively reduce the water and sediment resources available for Louisiana's coastal restoration program.

If you have any questions or concerns, please contact Liz Davoli in our Planning and Research Division at 225-342-4616.

Sincerely. Kyle Graham

Executive Director



LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY MIKE STRAIN DVM COMMISSIONER



November 19, 2015

James J. Devitt Deputy General Counsel Louisiana Department Natural Resources Office of the Secretary/ Legal Division James.Devitt@LA.GOV

Dear Jim,

The comments the other state agencies have made regarding the proposed diversion of water from the Mississippi River in southeast Arkansas to east Texas captures most of the concerns that the Louisiana Department of Agriculture and Forestry Office of Soil and Water Conservation has with the proposed diversion.

Although the proposed project would withdraw only about one percent of Mississippi River flow it is important to identify the potential adverse impacts that may occur by changing flow regime of the river. Other agencies have identified a wide range of potential impacts including those that would adversely impact Louisiana agriculture, aquaculture, and forestry industries. Our principal concerns include increased adverse impacts on shipping and increased dredging as well as port and dock maintenance. Other potential impacts may include restrictions of the state's future withdrawal of water from the Mississippi River for agriculture, municipalities and industrial uses, and withdrawals may adversely affect the recharge of Louisiana's alluvial aquifers and further restrict stream loading (TMDL's).

In summary it is important that we continue to work with ANRC to ensure that we have no adverse impacts and that we protect the state from any social economic or environmental impacts that would adversely affect the citizens of Louisiana and our neighboring states.

Assistant Commissioner, LDAF/Office of Soil and Water Conservation

Agricultural & Environmental Sciences Suite 3000 (225) 925-3770 Fax: 925-3760

Agro-Consumer Services Suite 5000 (225) 922-1341 Fax: 923-4877

Animal Health & Food Safety Suite 4000 (225) 925-3962 Fax: 925-4103

Forestry Suite 6000

(225) 925-4500 Fax: 922-1356

Management & Finance Suite 1000 (225) 922-1255 Fax: 925-6012

Soil & Water Conservation Suite 7000 (225) 922-1269 Fax: 922-2577 BOBBY JINDAL GOVERNOR



PEGGY M. HATCH SECRETARY

State of Louisiana department of environmental quality environmental services

October 21, 2015

Thomas Van Biersel Louisiana Department of Natural Resources 617 North Third Street Baton Rouge, LA 70802-5428

RE: Proposed Mississippi River Water Transfer in Southern Arkansas; LDEQ Agency Interest Numbers: 168748, 91406, 91409, 91412, 91413, 91135, 91168, 91171, 91177, 91366, 91377, 91378, 91382, 91383, 91384, 91175, 91375, 91403, 91376, 91178, 91179, 91180.

Dear Mr. Van Biersel:

The Louisiana Department of Environmental Quality (LDEQ) appreciates the opportunity to review the proposed water transfer. The LDEQ considers the Mississippi River to be one of its most important natural resources and recognizes that many industries and stakeholders depend on the river.

The documentation indicates that BWG corporation plans to build, operate and maintain a water transmission pipeline capable of lifting and transporting 750+MGD (1,160 + cfs) of water from the Mississippi River, across south Arkansas to be sold and delivered to municipalities in north Texas. The pipeline will also divert water to streams across south Arkansas. These streams are to be designated by the Arkansas Natural Resources Commission (ANRC) and municipalities across south Arkansas.

The withdrawals will occur from the Mississippi River at a location near Dermott, Arkansas. Flow in the Mississippi River directly affects flow and water quality in several Louisiana water bodies. These subsegments are protected by water quality criteria to support specific designated uses (*see LAC 33:IX.1123. Table 3*). Table 1 (attachment) presents the primary subsegments impacted by flow and water quality in the Mississippi River, either directly or indirectly. Additional subsegments may also be impacted. Table 1 also shows the most recent water quality assessments, as stated in LDEQ's 2014 Water Quality Integrated Report.

Additionally, the LDEQ's Surface Water Quality Standards outline the following protection for surface water flows:

"The natural flow of state waters shall not be altered to such an extent that the basic character and water quality of the ecosystem are adversely affected except in situations where alterations are necessary to protect human life or October 21, 2015 Proposed Mississippi River Water Transfer Page 2 of 6

> property. If alterations to the natural flow are deemed necessary, all reasonable steps shall be taken to minimize the adverse impacts of such alterations. Additionally, all reasonable steps shall be taken to mitigate the adverse impacts of unavoidable alterations." (LAC 33:IX.1113.B.10)

Based on the LDEQ's review of the information provided, the concerns below have been identified. Although the initial proposal indicates the project will withdraw only approximately 1% of the river flow, the documentation indicates that a flow analysis will be conducted on the Mississippi River. This analysis will outline "excess" water for future use such that 25% of the excess above the average annual base yield may be utilized for various purposes. It also indicates that a 10-foot diameter pipe will be used to transfer the water. Based on LDEQ's review of the information provided, decreased downstream water availability potentially affects:

- Withdrawals for drinking water, industrial, and agriculture uses
- Diversions for coastal restoration efforts such as those for marsh/wetland creation/restoration and abating saltwater intrusion
- Other types of restoration projects (e.g. batture reforestation, floodplain connectivity, secondary channel diversification, recreational access, and enhancing main channel habitat diversity)
- Saltwater wedge\intrusion moving up Mississippi River
- Water quality
- Habitat
- Navigation (commerce and recreation)
- Docks (water surface elevation)
- Water intakes (depth of the intakes and water quality for facility cooling water, drinking water)
- Discharge pipes (depth of discharge pipes)
- Ferry ports (water surface elevation)
- Mixing zones
- Bridge pilings
- Levee stability
- Dredging
- Assimilative capacity
 - o Increased potential for WQBELs (e.g. Hexachlorobenzene and Hexachlorobutadiene)
 - Current Permitting Flows on River
 - 7Q10 141,955 cfs
 - Harmonic Mean 366,748 cfs
 - Potential new permitting flows based on 25% excess definition
 - 7Q10 106, 466 cfs
 - Harmonic Mean 275,061 cfs
- Potential to alter dynamics involved with Endangered Species evaluations
- Potential to alter dynamics involved with Entrainment/Impingement evaluations

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LDEQ recommends that Federal and State wildlife and fishery agencies and the Lower Mississippi Conservation Committee be included in the review process for the proposed transfer since the reduced flow could impact habitat restoration, aquatic and terrestrial species populations, and recreation access projects.

If you have any questions or comments, please contact Mr. Scott Guilliams at (225) 219-3187.

Sincerely,

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Tégán Treadaway Assistant Secretary Office of Environmental Services

ec: Tom Killeen, LDEQ Scott Guilliams, LDEQ William C. Berger, Jr., LDEQ Amanda G. Vincent, PhD, LDEQ Al Hindrichs, LDEQ Steph Braden, LDEQ Bijan Sharafkhani, LDEQ Gwendolyn Berthelot, LDEQ Karen Vidrine, LDEQ October 21, 2015 Proposed Mississippi River Water Transfer Page 4 of 6

Table 1. Listing of Louisiana Water Bodies Affected by Flow and Water Quality in the Mississippi River and Associated Impairments

Subsegment	Description	Impairment(s)	Suspected Cause(s)
(合計)、2019年2	Direct	ly Impacted Subsegme	nts
070101	Mississippi River – From Arkansas state line to Old River Control Structure	No impairments	
070201	Mississippi River – From Old River Control Structure to Monte Sano Bayou	No impairments	
070301	Mississippi River –Monte Sano Bayou to Head of Passes	No impairments	
		Subsegments From the	Mississippi River
010101	Atchafalaya River Headwaters and Floodplain – From Old River Control Structure to Simmsport; includes Old River Diversion Channel, Lower Red River, Lower Old River	No impairments	
010201	Atchafalaya River Mainstem – From Simmsport to Whiskey Bay Pilot Channel at mile 54	No impairments	
010501	Lower Atchafalaya Basin Floodway – From Whiskey Bay Pilot Channel at mile 54 to US-90 bridge in Morgan City; includes Grand Lake and Six-Mile Lake	No impairments	
010801	Atchafalaya River – From Intracoastal Waterway south of Morgan City to Atchafalaya Bay; includes Sweetwater and Bayou Shaffer	No impairments	
	Secondary Distributary		
060204	Bayou Courtableau – From headwaters to West Atchafalaya Borrow Pit Canal	Turbidity Fecal Coliform	Source Unknown Livestock (Grazing or Feeding Operations), On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems)
060301	Bayou Teche – From headwaters at Bayou Courtableau to the Keystone Locks and Dam	Carbofuran Fecal Coliform	Agriculture On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems), Package Plant or Other Permitted Small Flows Discharges

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		Carbofuran	Agriculture
060401		Nitrate/Nitrite (Nitrite+Nitrate as N)	Agriculture, Municipal Point Source Discharges
	Bayou Teche – From	Dissolved Oxygen	Agriculture, Municipal Point Source Discharges
	Keystone Locks and Dam to Charenton Canal	Phosphorus (Total)	Agriculture, Municipal Point Source Discharges
		Fecal Coliform	On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems), Package Plant or Other Permitted Small Flows Discharges
		Nitrate/Nitrite (Nitrite+Nitrate as N)	Source Unknown
	Charenton Canal – From	Dissolved Oxygen	Source Unknown
	Charenton floodgate to	Phosphorus (Total)	Source Unknown
060601	ICWW; includes Bayou	Turbidity	Source Unknown
	Teche from Charenton to Baldwin	Fecal Coliform	On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems), Package Plant or Other Permitted Small Flows Discharges
060501	Bayou Teche – From Charenton Canal to Wax Lake Outlet	Dissolved Oxygen	Municipal Point Source Discharges, On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems), Package Plant or Other Permitted Small Flows Discharges
		Fecal Coliform	On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems), Package Plant or Other Permitted Small Flows Discharges
010803	Intracoastal Waterway – From Bayou Boeuf Lock to Bayou Sale; includes Wax Lake Outlet to US-90	No impairments	
010802	Wax Lake Outlet – From US-90 to Atchafalaya Bay; includes Wax Lake	No impairments	
		Mercury in Fish	Atmospheric Deposition, Source
	Atchafalaya Bay and Delta	Tissue	Unknown
010901	and Gulf Waters to the State 3 mile limit	Fecal Coliform	Natural Sources, Package Plant or Other Permitted Small Flows Discharges
		Carbofuran	Agriculture
		Nitrate/Nitrite (Nitrite+Nitrate as N)	Source Unknown
060901	Vermilion River – From	Dissolved Oxygen	Natural Sources
060801	headwaters to LA-3073	Fecal Coliform	On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems), Package Plant or Other Permitted Small Flows Discharges

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	Vermilion River – From LA- 3073 to the Intracoastal Waterway	Carbofuran	Agriculture
		Nitrate/Nitrite	Agriculture, Municipal Point Source
		(Nitrite+Nitrate as N)	Discharges
		Dissolved Oxygen	Agriculture, Municipal Point Source Discharges
060802		Total Dissolved Solids	Natural Sources
			On-Site Treatment Systems (Septic
		Fecal Coliform	Systems and Similar Decentralized
			Systems), Package Plant or Other
			Permitted Small Flows Discharges
	Vermilion River Cutoff – From Intracoastal Waterway to Vermilion Bay (Estuarine)	Carbofuran	Agriculture
		Turbidity	Agriculture
060803		Fecal Coliform	On-Site Treatment Systems (Septic
000005			Systems and Similar Decentralized
			Systems), Package Plant or Other
			Permitted Small Flows Discharges
	Bayou Teche – From Berwick to Wax Lake Outlet	Non-Native Aquatic	Introduction of Non-native Organisms
010701		Plants	(Accidental or Intentional)
		Sulfates	Freshets or Major Flooding, Transfer
			of Water from an Outside Watershed
			On-Site Treatment Systems (Septic
061104	Vermilion Bay	Fecal Coliform	Systems and Similar Decentralized
			Systems)

Bobby Jindal GOVERNOR



Kathy Kliebert SECRETARY

State of Louisiana

Department of Health and Hospitals Office of Public Health

November 4, 2015

Thomas Van Biersel, Ph.D., P.G. Louisiana Department of Natural Resources 617 North Third Street Baton Rouge, LA 70802

RE: BWG Corp. Application for Non-Riparian Water Use Mississippi River Chicot County, Arkansas

Dear Dr. Van Biersel:

The Louisiana Department of Health and Hospitals appreciates the opportunity to review the proposed project to install a pipeline capable of transferring approximately 750 million gallons of water per day from the Mississippi River east of Dermott, AR, across south Arkansas, to a terminus near Texarkana, TX, for the stated purpose of selling and delivering said water to municipalities in north Texas, for the stated duration exceeding 75 years.

The reported withdrawal rate of 1,160 cubic feet per second represents less than one percent of typical flow in the Mississippi River, and as such may pose no significant concern in and of itself. However, during periods of low flow, drinking water utilities in the lower reaches of the Mississippi River frequently experience elevated salinity levels as a direct result of upstream migration of the saltwater wedge. The presence of this saltwater wedge has in the past resulted in the temporary closure of drinking water intakes. LDHH is concerned that cumulative effects of the proposed withdrawal and any other concurrent withdrawal activities may exacerbate such negative impacts to the drinking water supplies in the lower Mississippi River.

Sincerely.

Amanda Laughlin, P.E. Acting Chief Engineer Louisiana Department of Health and Hospitals, Office of Public Health Engineering Services Telephone: (225) 342-7499 Electronic mail: amanda.laughlin@la.gov

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BOBBY JINDAL GOVERNOR



STEPHEN CHUSTZ SECRETARY

State of Louisiana department of natural resources OFFICE OF THE SECRETARY

November 16, 2015

Mr. Kenneth W. Brazil, P.E. Arkansas Natural Resources Commission 101 E. Capitol, Suite 350 Little Rock, AR 72201

RE: BWG Corp. Application Non-Riparian Water Use Mississippi River Chicot County, Arkansas

Dear Mr. Brazil:

Thank you for affording our Department the opportunity to contribute comments on BWG Corporation's request to withdraw water from the Mississippi River in Chicot County, Arkansas. This opportunity is important because the activity may impact surface and ground water resources within the State of Louisiana. We also appreciate you and your team coming to our offices here in Baton Rouge to present information and discuss the possible implications for our states' water resources.

The Department is determined to ensure that the proper management of our surface and ground water resources is performed in a sound and sustainable manner, and is protective of commerce, the wildlife and fisheries resources of the State and the environment.

According to the limited information we have received thus far, the applicant proposes to withdraw water at a potential rate of 750+ million gallons per day for a period of 75+ years. This project would be the first of its kind to our knowledge in the lower Mississippi Valley.

Numerous questions and concerns are raised by this proposal. Based on the information we have thus far, this activity, if permitted during low flow periods, may adversely impact (1) stream flow energy, sediment load and distribution, (2) public, riparian or agriculture water demand downstream of the pull point, (3) recharge of freshwater aquifers, and (4) result in further intrusion of saltwater up the Mississippi and Atchafalaya Rivers.

The application made to the Arkansas Natural Resources Commission (ANRC) represents a potential water withdrawal in excess of 1,160 cfs from the river. Under normal flow condition

Post Office Box 94396 • Baton Rouge, Louisiana 70804-9396 617 North Third Street • 12th Floor • Suite 1240 • Baton Rouge, Louisiana 70802 (225) 342-2710 • Fax (225) 342-5861 • http://www.dnr.louisiana.gov An Equal Opportunity Employer this lone use may not be a concern, however, there are questions about adverse impacts resulting from multiple, simultaneous and/or adjacent water withdrawals on the resource. Potential cumulative impacts may affect flow energy, load and distribution.

It is likely that there are other water withdrawal activities, including, but not limited to, irrigation, agriculture, aquaculture, industry, or water control activity within the Mississippi's drainage basin. It is recommended that simultaneous and/or adjacent water withdrawals be carefully evaluated to prevent or contribute to low flow conditions.

The withdrawals proposed, even though upriver from Louisiana, may have detrimental impacts on the recharge of the Mississippi River Alluvial Aquifer and other principal freshwater aquifers of the State. The Catahoula, the Southern Hills and the Cockfield aquifers may also be affected by this project.

Saltwater intrusion regularly threatens the water supply system of communities downstream on the lower end of the Mississippi River. Additionally, every five years or so, the New Orleans supply is threatened, requiring the construction of a saltwater sill on the bed of the river channel.

It should be noted that LDNR has received from time to time informal inquiries from parties interested in interstate water transfer projects from the Mississippi and Atchafalaya Rivers. However, no formal applications for water withdrawal have been received as of yet.

We appreciate the opportunity to provide comments on these proposed activities and request to be updated on how our concerns are to be addressed prior to any action being taken.

Sincerely,

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James H. Welsh Commissioner of Conservation

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Keith Lovell Assistant Secretary Office of Coastal Management



BOBBY JINDAL GOVERNOR State of Louisiana Department of Wildlife & Fisheries ROBERT J. BARHAM SECRETARY

November 4, 2015

Honorable Buddy Caldwell, Attorney General Office of the Attorney General P.O. Box 94005 Baton Rouge, LA 70804

RE: BWG Corp. (an Arkansas Company) Proposed Mississippi River Diversion from South Arkansas to East Texas

Dear Mr. Caldwell:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the Arkansas Natural Resources Commission application for non-riparian water use by BWG Corp. The applicant proposes to build, operate and maintain a water transmission pipeline capable of transporting 750+ million gallons of water per day from the Mississippi River, across south Arkansas to be sold and delivered to municipalities in north Texas. Additionally, the pipeline will divert water to points across south Arkansas. The applicant proposes to operate the pipeline continuously for 75+ years. Based upon our review of the application, LDWF opposes the proposed project. Our opposition is based on the following:

- 1. A permit authorizing a continuous 75+ year water withdrawal is not acceptable based on a lack of information and without proper contingency planning for the future. There has been no thorough or comprehensive evaluation of how factors such as drought, climate change, planned coastal freshwater diversions, and potential changes to river flow regimes (as compared to historic trends) in combination with the proposed water transmission pipeline may adversely impact commercial navigation, delta building processes (i.e., Atchafalaya), coastal wetland sustainability, fisheries and other resources.
- 2. The application refers to pipeline water diverted to points and municipalities across southern Arkansas. The effect of these diversions into southern Arkansas waterbodies has not been thoroughly evaluated. Such "supplemental" stream flows could impact Louisiana by spreading noxious and invasive species, altering stream flow regime and water quality, and affecting native aquatic organisms. Such supplemental stream flows shall not be allowed into streams that flow into Louisiana without eliminating the potential for such impacts.
- 3. The proposed 750+ million gallons per day withdrawal has not been modeled. The applicant must develop a hydrodynamic model to demonstrate the impact of the water withdrawal on the river's flow regime. Low flow conditions with and without the water transmission pipeline must be modeled. Louisiana state agencies must be included in the development and verification of the hydrodynamic model.
- 4. Five Louisiana streams which may be impacted by the supplemental diversions are designated as State Natural and ScenicRivers beginning at the Arkansas-Louisiana state line. These Natural and Scenic streams are Bayou Bartholomew, Ouachita River, Bayou D'Loutre, Corney Bayou and Bayou Dorcheat. No

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supplemental stream flows may be diverted to any of these streams without obtaining approval for the LDWF Scenic Rivers Program.

5. The Mississippi River Alluvial Plain and Atchafalaya River Basin in Louisiana are comprised of significant expanses of bottomland hardwood forest, cypress-tupelo-blackgum swamp, and fresh and saltwater marshes. These communities support some of Louisiana's rare, threatened and endangered species, some of which are only found in these natural community types. Biologists of the LDWF Louisiana Natural Heritage Program (LNHP) have reviewed the threatened and endangered species and the Species of Greatest Conservation Need (SGCN) that may be impacted by the proposed project and provided the following information regarding potential immediate and long-term impacts. These species also hold various global and State rarity ranks (ex. S1, G2, etc...). Please see enclosed "Explanation of Ranking Categories..." and the Appendix for more information.

Threatened and Endangered Species

<u>Mollusks</u>

- Fat Pocketbook (Potamilus capax) (S1) (Federally Endangered)
- Rabbitsfoot (Quadrula cylindrical) (S1) (Federally Threatened)

The Fat Pocketbook (*Potamilus capax*) is listed as endangered under the U.S. Fish and Wildlife Service (USFWS) Endangered Species Act (ESA) and is listed as critically imperiled in Louisiana with an S1 state rank. This species prefers sand, mud and fine gravel bottoms of small to large rivers with moderate currents.

The Rabbitsfoot (*Quadrula cylindrical*) is listed as federally threatened, and is considered rare in Louisiana. It inhabits small to medium rivers with moderate to swift currents, in smaller streams it inhabits bars or gravel adjacent to swift currents, and in medium to large rivers it has been found in sand and gravel substrate with water up to 3 meters deep.

Current threats to these species include impoundments, clear-cutting riparian zones, and the increase in siltation which adversely impact habitat and the distribution of host fish. Additionally, pollutants to the Mississippi River and its tributaries may be detrimental and changes in water quality from increased sedimentation and runoff may alter the habitat quality for host fish species, thereby affecting mussel reproduction. Habitat protection for these species is recommended by preserving streamside management zones, avoiding or minimizing disturbances such as water pollution, erosion, and siltation. It is important to avoid disturbances of stream bottoms and existing mussel beds.

Inland Fish

- Pallid Sturgeon (Scaphirhynchus albus) (S1) (Federally Endangered)
- Shovelnose Sturgeon (Scaphirhynchus platorynchus) (S4) (Federally Threatened)

The Pallid Sturgeon (*Scaphirhynchus albus*) is listed as endangered under the ESA and considered rare in Louisiana. This species occurs in the Mississippi River Basin, including the Mississippi, Atchafalaya, and Red River in Louisiana. It requires large, turbid, free-flowing riverine habitat and is a well-adapted bottom dweller of large rivers with sand and gravel bars. This species typically spawns May-August but successful reproduction has been severely reduced due to habitat modification including the loss of habitat through the construction of dams that have modified flows, reduced turbidity and lowered water temperatures.

The Shovelnose Sturgeon (*Scaphirhynchus platorynchus*) is federally listed as threatened due to similarity of appearance with the Pallid Sturgeon and occurs in the Mississippi River Basin. This species usually

spawns during April to early July and are well-adapted bottom dwellers that require strong currents and deep channels with sand and gravel substrates in large, turbid, free-flowing rivers.

Habitat destruction and river modification are the primary stressors affecting abundance and distribution of these species. Necessary precautions should be taken to avoid any degradation of water quality to the Mississippi River Basin and disruption of spawning season.

<u>Birds</u>

- Interior Least Tern (Sternula antillarum athalassos) (S1B) (Federally Threatened)
- Piping Plover (*Charadrius melodus*) (S2N) (Federally Threatened)

The Interior Least Tern (*Sternula antillarum athalassos*) is listed as endangered under the ESA and critically imperiled in Louisiana. Interior Least Terns breed along the northern Mississippi River and along the Red River with nesting beginning in late April and ending in August. Critical habitat includes dry, exposed sandbars and favorable river flow that support forage fish supply. Habitat required by this species has been decimated by extensive water management projects and increased use of beaches and sandbars. Precautionary measures should be taken to avoid impacts to required habitat for this species and disturbance during the breeding season.

The Piping Plover (*Charadrius melodus*) is federally listed as threatened and has designated critical habitat under the ESA. Piping plovers winter in Louisiana along the coast; they arrive in late July and may be present for 8 to 10 months. Piping plovers feed on intertidal beaches, mudflats, sand flats with no or very sparse emergent vegetation; they also required unvegetated or sparsely vegetated areas for roosting. Primary threats to this species are destruction and degradation of summer and winter habitat, habitat alteration and destruction (shoreline erosion, woody species encroachment of lake shorelines and riverbanks, human disturbance of foraging birds). Precautionary measures should be taken to avoid impacts to foraging and roosting habitat for this species.

Reptiles

- Loggerhead Sea Turtle (Caretta caretta) (S1B, S3N) (Federally Threatened)
- Green Sea Turtle (Chelonia mydas) (S1N) (Federally Threatened)
- Hawksbill Sea Turtle (*Eretmochelys imbricata*) (SZ) (Federally Endangered)
- Kemp's Ridley Sea Turtle (Lepidochelys kempii) (S1B, S3N) (Federally Endangered)
- Leatherback Sea Turtle (Dermochelys coriacea) (SZ) (Federally Endangered)

The five species of sea turtles listed above are all federally listed under the ESA. Although all five species may be found along the Louisiana coast, LNHP has documented nests for the Loggerhead Sea Turtle; however, other sea turtle species may nest in Louisiana. The estuarine and off-shore waters afford key feeding and developmental sites, especially sea grass beds.

Mammals

- Louisiana black bear (Ursus americanus luteolus) (S3) (Federally Threatened)
- West Indian Manatee (Trichechus manatus) (S1N) (Federally Endangered)

The Louisiana Black Bear (Ursus americanus luteolus) is listed as threatened under the ESA. The Louisiana black bear utilizes a variety of habitat types, including forested wetlands, marsh, spoil banks, and upland forests. The primary threats to the species are continued loss of bottomland hardwoods, fragmentation of remaining forested tracts, and human-caused mortality. Louisiana black bears, particularly pregnant females, normally den from December through April. Bald cypress (Taxodium distichum) and tupelo gum (Nyssa aquatica) with visible cavities, having a diameter at breast height of 36 inches or greater, and occurring in or along rivers, lakes, streams, bayous, sloughs, or other water bodies have legal protection as candidate or actual den+5+21+ trees. Precautionary measures should be taken to avoid destruction of Louisiana black bear habitat and denning trees.

West Indian Manatees (*Trichechus manatus*) are listed as federally endangered and protected under the ESA and the Federal Marine Mammal Protection Act and are considered rare in Louisiana. Critical habitat for manatee includes marine submergent vascular vegetation (sea-grass beds). Manatees inhabit both fresh and salt water and although most manatees are year round residents of Florida or Central America, they have been known to migrate to areas along the Atlantic and Gulf coast during the summer months. LNHP has documented manatee sightings in waterways in nearly all of the southern Louisiana parishes. The manatee's low reproductive rate, combined with loss of habitat and high rates of mortality, often due to human-related causes, threaten this animal's survival. Watercraft collisions account for approximately 25% of all manatee deaths and are the single greatest cause of human- related mortality. Ultimately, however, loss of suitable habitat through incompatible coastal development, particularly destruction of seagrass beds by boating facilities is the most serious threat. Precautionary measures should be taken to preserve manatee habitat including water quality and sea grass beds in Louisiana.

As suggested by the above comments, the diversion of water from the Mississippi River at the proposed site may potentially have immediate and long-term impacts on federally threatened and endangered species, rare plants, animals and communities in Louisiana.

LNHP has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. LNHP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

The Louisiana Department of Wildlife and Fisheries appreciates the opportunity to review and provide recommendations to you regarding this proposed activity. The comments and recommendations provided in this letter shall require thorough consideration and be individually and adequately addressed by the applicant. Please do not hesitate to contact LDWF Permits Coordinator Dave Butler at 225-763-3595 should you need further assistance.

Sincerely,

Robert L Barham Secretary

Attachment

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Moliusks (13)		Immediate Impact	Long-term Impact
Butterfly	Ellipsaria lineolata	x	
Elephant-ear	Elliptio crassidens	x	
Fat Pocketbook	Potamilus capax	x	
Ebonyshell	Fusconaia ebena	x	
Plain Pocketbook	Lampsilis cardium	x	
Fatmucket	Lampsilis siliquoidea	x	
White Heelsplitter	Lasmigona complanata	x	
Southern Hickorynut	Obovaria jacksoniana	x	
Pyramid Pigtoe	Pleurobema rubrum	x	
Rabbitsfoot	Quadrula cylindrica	x	
Southern Creekmussel	Strophitus subvexus	x	1
Round Pearlshell	Glebula rotundata	x	
Fawnsfoot	Truncilla donaciformis	x	
Crustaceans (5)		Immediate Impact	Long-term Impact
Vernal Crawfish	Procambarus viaeviridis		x
Beach Ghost Shrimp	Callichirus islagrande		x
Carolinian Ghost Shrimp	Callichirus major		x
Peppermint Shrimp	Lysmata wurdemanni		x
Estuarine Ghost Shrimp	Lepidophthalmus louisianensis		x
Inland Fish (21)		Immediate Impact	Long-term Impact
Pallid Sturgeon	Scaphirhynchus albus	x	
Shovelnose Sturgeon	Scaphirhynchus platorynchus	x	
Paddlefish	Polyodon spathula	x	
American Eel	Anguilla rostrata	x	
Alabama Shad	Alosa alabamae	x	
Central Stoneroller	Campostoma anomalum	x	
Bluntface Shiner	Cyprinella camura	x	
Steelcolor Shiner	Cyprinella whipplei	x	
Sturgeon Chub	Macrhybopsis gelida	x	
Shoal Chub	Macrhybopsis hyostoma	x	
Sicklefin Chub	Macrhybopsis meeki	x	
Longjaw Minnow	Notropis amplamala	x	
Bigeye Shiner	Notropis boops	x	

APPENDIX 1	Table of Mississip	pi Basin Species	of Greatest	Conservation Need
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Ironcolor Shiner	Notropis chalybaeus	x	
Chub Shiner	Notropis potteri	x	
Blue Sucker	Cycleptus elongatus	x	
Gulf Pipefish	Syngnathus scovelli	x	te.
Redspot Darter	Etheostoma artesiae	x	
Rainbow Darter	Etheostoma caeruleum	x	
Bigscale Logperch	Percina macrolepida	x	
Saddleback Darter	Percina vigil	x	
Marine Fish (14)		Immediate Impact	Long-term Impact
Diamond Killifish	Adinia xenica		x
Saltmarsh Topminnow	Fundulus jenkinsi		x
Bayou Killifish	Fundulus pulvereus		x
Opossum Pipefish	Microphis brachyurus		x
Chain Pipefish	Syngnathus louisianae		x
Large-scaled Spinycheek Sleeper	Eleotris amblyopsis		x
Frillfin Goby	Bathygobius soporator		x
Violet Goby	Gobioides broussonnetii		x
Broad Flounder	Paralichthys squamilentus		x
Southern Puffer	Sphoeroides nephelus		x
Lemon Shark	Negaprion brevirostris		x
Smalltooth Sawfish	Pristis pectinata		x
Tarpon	Megalops atlanticus		x
Dwarf Seahorse	Hippocampus zosterae		x
Birds (7)		Immediate Impact	Long-term Impact
Caspian Tern	Sterna caspia		x
Gull-billed Tern	Sterna nilotica		x
Interior Least Tern	Sterna antillarum athalassos	x	
Osprey	Pandion haliaetus		x
Piping Plover	Charadrius melodus		x
Snowy Plover	Charadrius alexandrinus		x
Waterbird Nesting Colony	Waterbird Nesting Colony		x
Reptiles (12)		Immediate Impact	Long-term Impact
Loggerhead Sea Turtle	Caretta caretta		x
Green Sea Turtle	Chelonia mydas		x
Hawksbill Sea Turtle	Eretmochelys imbricata		x

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Kemp's Ridley Sea Turtle	Lepidochelys kempii		x
Leatherback Sea Turtle	Dermochelys coriacea		x
Alligator Snapping Turtle	Macrochelys temminckii	x	
Smooth Softshell	Apalone mutica	x	
Western Chicken Turtle	Deirochelys reticularia miaria		x
Mississippi Diamond-backed Terrapin	Malaclemys terrapin pileata		x
Ouachita Map Turtle	Graptemys ouachitensis ouachitensis	x	
Razor-backed Musk Turtle	Sternotherus carinatus	x	
Gulf Saltmarsh Snake	Nerodia clarkii clarkii	-	x
Mammals (4)		Immediate Impact	Long-term Impact
Big Brown Bat	Eptesicus fuscus		x
Long-tailed Weasel	Mustela frenata		x
Louisiana Black Bear	Ursus americanus luteolus		x
West Indian Manatee	Trichechus manatus		x
Plants (18)		Immediate Impact	Long-term Impact
Allegheny-spurge	Pachysandra procumbens		x
Carpenter's Ground-cherry	Physalis carpenteri		x
Correll's False Dragon-head	Physostegia correllii		x
delta bulrush	Scirpus deltarum		x
Golden Canna	Canna flaccida		x
Long-beaked Baldrush	Rhynchospora scirpoides		x
National Champion Tree	National champion tree		x
Nodding Pogonia	Triphora trianthophora		x
Powdery Thalia	Thalia dealbata		x
Punctate Cupgrass	Eriochloa punctata		x
Sand Dune Spurge	Chamaesyce bombensis		x
Silvery Glade Fern	Deparia acrostichoides		x
Snow Melanthera	Melanthera nivea		x
southern horse-balm	Collinsonia serotina		x
Square-stemmed Monkey-flower	Mimulus ringens		x
State Champion Tree	State champion tree		x
Swamp Milkweed	Asclepias incarnata		x
Western Umbrella-grass	Fuirena simplex		x
Natural Communities (1)		Immediate Impact	Long-term Impact
Batture	Batture (riverfront pioneer)	x	

EXPLANATION OF RANKING CATEGORIES EMPLOYED BY NATURAL HERITAGE PROGRAMS NATIONWIDE

reason, the accuracy of the information contained within this document cannot be guaranteed and the reader is cautioned that it is his/her responsibility to be apprised of the laws in effect at any given under the provisions of the Endangered Species Act of 1973. DISCLAIMER: This document is not an official copy of the laws in effect and should not be utilized or relied upon as such. For this assigned by each state's Natural Heritage Program, thus a rank for a particular element may vary considerably from state to state. Federal ranks are designated by the U.S. Fish & Wildlife Service Each element is assigned a single global rank as well as a state rank for each state in which it occurs. Global ranking is done under the guidance of NatureServe, Arlington, VA. State ranks are any local or parish ordinances. time. These laws include those contained within the Louisiana Revised Statutes, particularly Title 56, the official regulations of the Louisiana Wildlife and Fisheries Commission, federal laws, and

- FEDERAL RANKS (USESA FIELD):
- E
- = Listed Endangered
- PE = Proposed endangered 5 Listed Threatened
- PT = Proposed Threatened
- C = Candidate
- PDL = Proposed for delisting
- E (S/A) or T (S/A) = Listed endangered or threatened because of similarity of appearance
- XE = Essential experimental population
- XN = Nonessential experimental population No Rank = Usually indicates that the taxon does not have any federal status. However, because of potential lag time between publication in the Federal Register and entry in the central databases and state databases, some taxa may have a status which does not
- (Rank, Rank) = Combination values in parenthesis = The taxon itself is not named in the Federal Register as having U.S. ESA status; however, all of its infraspecific taxa (worldwide) do have official status. The statuses shown in parentheses indicate the statuses that apply to infraspecific taxa or populations within this taxon. *THE SPECIES IS CONSIDERED TO HAVE A COMBINATION STATUS IN LOUISIANA*(PS) = partial status= Status in only a portion of the species' range. Typically indicated in a "full" species does not. *THE SPECIES DOES NOT HAVE A STATUS IN*(PS) = partial status= Status on *THE SPECIES DOES NOT HAVE A STATUS IN*(PS) = partial status= Status on *THE SPECIES DOES NOT HAVE A STATUS IN*
- (PS: Rank) = partial status= Status in only a portion of the species' range. The value of that status appears because the entity with status does not have an individual entry in Natureserve. THE SPECIES MAY HAVE A STATUS IN LOUISIANA GLOBAL ELEMENT RANKS:
- G1 = critically imperiled globally because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extinction
- G2 = imperiled globally because of rarity (6 to 20 known extant populations) or
- G3 = either very rare and local throughout its range or found locally (even abundantly at some because of some factor(s) making it very vulnerable to extinction throughout its range other factors making it vulnerable to extinction throughout its range (21 to 100 known of its locations) in a restricted range (e.g., a single physiographic region) or because of
- Q4 = apparently secure globally, though it may be quite rare in parts of its range, especially at extant populations)
- G5 = demonstrably secure globally, although it may be quite rare in parts of its range the periphery (100 to 1000 known extant populations)
- especially at the periphery (1000+ known extant populations)
- GH = of historical occurrence throughout its range; i.e., formerly part of the established biota, with the possibility that it may be rediscovered (e.g., Bachman's Warbler)
- GU possibly in peril range-wide, but status uncertain; need more information
- G? = rank uncertain. Or a range (c.g., G3G5) delineates the limits of uncertainty
- GQ = uncertain taxonomic status
- ŝ = believed to be extinct throughout its range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered

- subspecies or variety rank (e.g., G5T4 applies to a subspecies with a global species rank of G5, but with a subspecies rank of G4)
- STATE ELEMENT RANKS: S1 = critically imperiled in Louisiana because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extirpation
- imperiled in Louisiana because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extirpation

S2

- S locations) in a restricted region of the state, or because of other factors making it rare and local throughout the state or found locally (even abundantly at some of its
- ş = apparently secure in Louisiana with many occurrences (100 to 1000 known extant vulnerable to extirpation (21 to 100 known extant populations) populations)
- S a demonstrably secure in Louisiana (1000+ known extant populations)
- (B or N may be used as qualifier of numeric ranks and indicating whether the occurrence is breeding or nonbreeding)
- SA = accidental in Louisiana, including species (usually birds or butterflies) recorded once or range twice or only at great intervals hundreds or even thousands of miles outside their usual
- SH = of historical occurrence in Louisiana, but no recent records verified within the last 20 years; formerly part of the established biota, possibly still persisting
- SR = reported from Louisiana, but without conclusive evidence to accept or reject the report
- SU = possibly in peril in Louisiana, but status uncertain; need more information
- SX = believed to be extirpated from Louisiana
- SZ = transient species in which no specific consistent area of occurrence identifiable
- STATE PROTECTION STATUS:

Secretary of the Department of Wildlife and Fisheries is authorized to implement State status are contained in Tille 56 of the Louisiana Revised Statutes as well as additional restrictions in emergency situations in order to protect fish and wildlife Commission and the Secretary of the Department of Wildlife and Fisheries. The resources. relevant rules and regulations adopted by the Louisiana Wildlife and Fisheries

Endangered Taking or harassment of these species is a violation of state and federal laws.

Threatened = Taking or harassment of these species is a violation of state and federal laws.

Threatened/Endangered = Taking or harassment of these species is a violation of

state and federal laws. Prohibited = Possession of these species is prohibited. No legal harvest or

possession.

Restricted Harvest = There are restrictions regarding the taking and possession of these species

Tulane Institute on Water Resources Law & Policy

6325 Freret Street New Orleans, LA 70118 504-865-5982

November 13, 2015

Honorable Buddy Caldwell, Attorney General Office of the Attorney General P.O. Box 94005 Baton Rouge, LA 70804

RE: BWG Corp. Proposed Mississippi River Diversion from South Arkansas to East Texas

Dear Mr. Caldwell,

I am the Reporter for the newly formed Water Code Committee of the Louisiana State Law Institute and I appreciate the opportunity to comment on this proposed water transfer. For the reasons below, I believe that the State of Louisiana should urge the State of Arkansas to deny or table this and future permit applications for the out-of-state [basin] transfer of Mississippi River water, at least until a comprehensive water budget on the lower Mississippi River is developed that embraces the interstate nature and value of the Mississippi River and other interstate waters. Simply put, while it may be appropriate to consider transfers of "surplus" waters at some time, there is presently no way of determining that surplus flows exist. Given the transcendent importance of adequate flows to the survival and vitality of Louisiana's ecology and economy, as evidenced by the State's Coastal Master Plan and the formation of the Water Code Committee, it is vital that Louisiana communicate its interest in maintaining those flows with clarity and timeliness.

This is matter of the significant importance to the Water Code Committee. In 2014, the Louisiana Senate passed a resolution requesting the Louisiana Law Institute to create a Water Code Committee in order to develop proposed legislation establishing a comprehensive water code that integrates all of Louisiana's water resources. In order to properly steward Louisiana's water resources, a comprehensive state water budget and water plan must be developed in concert with the comprehensive water code. A well-developed water budget that accounts for surface water, ground water, and the interconnection between the two will be critical to managing this vital resource. The proposed withdrawal would not only impact surface water levels in the Mississippi river, but also the important and highly productive Mississippi River Valley alluvial aquifer . It

would be wise to fully understand these impacts and their effects before moving forward with an out-of-basin withdrawal of the magnitude proposed by BWG. Given Arkansas' experience in developing a robust state water plan and water laws, I would welcome the opportunity to dialogue and coordinate with the Arkansas Natural Resources Commission in the evaluation of waters that flow between our states as the Water Code Committee pursues its work.

Until such time as Louisiana, Arkansas, Mississippi, and the federal government have determined the current and future flows, needs, and plans on the lower Mississippi, prudence and public duty dictate that out-of-state[basin] transfers be deferred until their possibly consequences are better understood.

Sincerely yours,

Mark Davis Director, Tulane Institute on Water Resources Law and Policy Reporter, Louisiana State Law Institute Water Code Committee