

ADMINISTRATIVE LAW REVIEW  
ACCORD  
Volume 67

Comment

A FLUID SITUATION: ON THE ROLE OF INTERSTATE WATER  
COMMISSIONS IN FRACKING POLICY

JOHN A. HOWES, JR.\*

TABLE OF CONTENTS

|  |    |
|--|----|
| Introduction .....   | 1  |
| I. Background.....   | 5  |
| A. Background On Fracking Operations .....   | 5  |
| B. Limited Federal Oversight of Fracking-Related Water<br>Issues .....                                     | 7  |
| C. Primary Regulation by States .....  | 7  |
| D. Continued Interstate Conflicts Over Fracking Necessitate a<br>Proper Dispute Resolution Mechanism ..... | 10 |
| II. The Development of Interstate Water Management<br>Commissions .....                                    | 10 |
| A. Background Information on Interstate Water Commissions ....   | 10 |

---

\* J.D. Candidate, American University Washington College of Law, 2015; B.A. Political Science and Spanish Language & Literature, Fordham University. The author would like to thank his parents, Deanna, Dede Rimas, Maria, ir Jonute for their love, support, and edits throughout this process. He thanks Prof. Amanda Leiter and the ALR editors for their great feedback and guidance. Thanks to Maryland Delegate Shane Robinson, from whom the author developed the idea for this Comment. He thanks Kinnie Smith, Dave Muchow, Shippen Howe, and Hilary Meltzer for their substantive feedback. He also thanks Congresswoman Marcy Kaptur and her staff; Scott Detrow; and Richard Cairo and Paula Ballaron of the SRBC for providing helpful background information. AMDG!

|   |    |
|---|----|
| B. The Delaware River Basin Commission .....  | 12 |
| C. The Susquehanna River Basin Commission.....  | 16 |
| D. Critiques of Interstate Water Commissions.....   | 20 |
| III. A Greater Role for Interstate Water Commissions in Fracking Regulation.....                                      | 22 |
| A. Interstate Water Commissions Have the Authority and Resources Necessary for Resolving Disputes Between States..... | 23 |
| 1. Authority Over Water Quality Issues .....  | 23 |
| 2. The Susquehanna River Basin Commission's Enforcement Authority .....   | 25 |
| B. States Should Utilize Their Membership in Interstate Water Commissions to Resolve Disputes.....                    | 28 |
| C. Benefits of Pursuing Resolution Through Interstate Water Commissions .....   | 29 |
| Conclusion.....   | 31 |

## INTRODUCTION

On April 19, 2011, a natural gas well near LeRoy Township, Pennsylvania, blew out spilling thousands of gallons of water contaminated with chemicals<sup>1</sup> into a nearby stream.<sup>2</sup> Crews attempted to control the gushing well, forcing local families to evacuate the area.<sup>3</sup> Chesapeake Energy, the well's owner, had been conducting hydraulic fracturing operations, or "fracking," to extract natural gas from shale formations thousands of feet underground.<sup>4</sup> The fracking fluid and wastewater<sup>5</sup> from

---

1. See generally MINORITY STAFF OF H. COMM. ON ENERGY AND COMMERCE, 112TH CONG., CHEMICALS USED IN HYDRAULIC FRACTURING 1 (April 2011) available at <http://democrats.energycommerce.house.gov/sites/default/files/documents/Hydraulic-Fracturing-Chemicals-2011-4-18.pdf> [hereinafter CHEMICALS USED IN FRACKING] (explaining the results of a survey from 2005 to 2009, in which major natural gas companies that conduct hydraulic fracturing operations, or "fracking," used twenty-nine chemicals in their operations that were known or possible carcinogens, or regulated for health risks under the federal Safe Drinking Water Act (SDWA) or the Clean Air Act (CAA)).

2. Michael Rubinkam, *Drilling Fluid Gushes from Northern Pa. Gas Well*, ASSOCIATED PRESS, April 21, 2011, [http://articles.philly.com/2011-04-21/business/29459558\\_1\\_fracking-water-natural-gas-marcellus-shale](http://articles.philly.com/2011-04-21/business/29459558_1_fracking-water-natural-gas-marcellus-shale); Eric Hrin, *Fracking Fluid Spilled into Creek at Gas Well Incident Near LeRoy*, THEDAILYREVIEW.COM, April 20, 2011, <http://thedailyreview.com/fracking-fluid-spilled-into-creek-at-gas-well-incident-near-leroy-1.1135252>.

3. Hrin, *supra* note 2.

4. *Id.*; see generally CHEMICALS USED IN FRACKING, *supra* note 1, at 2–3 (explaining the usual fracking process, wherein high volumes of water, mixed with chemicals and sand, are injected into deep, underground wells at high pressures to create fissures that will release natural gas).

the blown out well eventually flowed into the Towanda Creek, a tributary of the Susquehanna River.<sup>6</sup> Concerned that the wastewater would flow to the Susquehanna River and into Maryland, Maryland Attorney General Douglas F. Gansler threatened to sue Chesapeake Energy and its affiliates for violating the federal Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA).<sup>7</sup> A year later, Gansler announced that he had secured \$500,000 from Chesapeake Energy for the Susquehanna River Basin Commission (SRBC).<sup>8</sup> The SRBC is an interstate commission that coordinates the water management operations of the states within the Susquehanna River Basin—New York, Pennsylvania, and Maryland.<sup>9</sup> The settlement payment will support the SRBC's water quality monitoring programs.<sup>10</sup> Although Gansler and Chesapeake Energy resolved their dispute outside of the courts, the prospect of states litigating to resolve future disputes regarding wastewater contaminating interstate waterways is unlikely to produce similar results.

Over 98% of fracking fluid is water, and approximately 8–10% of the water used in fracking operations can return to the surface within thirty

---

5. See *Waste Management of Cuttings, Drilling Fluids, Hydrofrack Water and Produced Water*, N.Y. STATE WATER RES. INST. (Mar. 21, 2012), [http://wri.eas.cornell.edu/gas\\_wells\\_waste.html](http://wri.eas.cornell.edu/gas_wells_waste.html) (describing the differences in the types of water used and produced during the fracking process and their corresponding names). First, well operators mix water with a propping agent, usually sand, and chemical additives to stimulate the well and keep fissures open—this is the “fracking fluid.” After stimulating the well and then releasing the water pressure, some fracking fluid returns quickly to the surface through the well and is called “flowback.” Flowback contains some of the chemicals from the fracking fluid as well as chemicals naturally occurring in the shale, so it is also called “wastewater.” When the well begins producing natural gas, some of the fracking fluid that did not return as flowback will be pumped out of the well with gas and water that naturally occurs in the shale—this is called “produced water.” Although there are technical differences between fracking fluid, flowback, produced water, and wastewater, for the purposes of this Comment, the author refers to any water used in the fracking process that returns to the surface as “wastewater.”

6. See Hrin, *supra* note 2 (explaining that fracking fluid that had been injected into the ground during fracking operations returned to the surface and eventually flowed into Towanda Creek).

7. 33 U.S.C. § 1251 (2012); see Press Release, Office of the Att’y Gen. of Md., Att’y Gen. Gansler Notifies Chesapeake Energy of the State’s Intent to Sue for Endangering the Health of Citizens and the Env’t (May 2, 2011) *available at* <http://www.oag.state.md.us/Press/2011/050211.html> (explaining the Attorney General’s threatened suit).

8. Press Release, Office of the Att’y Gen. of Md., AG Gansler Secures Funding to Safeguard Susquehanna Water Quality (June 14, 2012) *available at* <http://www.oag.state.md.us/Press/2012/061412.html> [hereinafter AG Gansler Secures Funding].

9. *Susquehanna River Basin Commission Overview*, SUSQUEHANNA RIVER BASIN COMM’N, <http://www.srbcc.net/about/geninfo.htm> (last visited Dec. 21, 2014) [hereinafter *SRBC Overview*] (describing the SRBC’s membership).

10. AG Gansler Secures Funding, *supra* note 8.

days after the well operator finishes injecting the fracking fluid into the well.<sup>11</sup> A typical fracking operation can require between 2.4 and 7.8 million gallons of water depending on a number of factors, including the depth of the well, the tightness of the shale play, and the composition of the fracking fluid.<sup>12</sup> The high amount of water needed for fracking operations creates many logistical issues for well operators, including determining available water sources for withdrawing millions of gallons of water (“water withdrawals”), transporting and storing the water, and disposing of the wastewater produced once the gas begins to release from the well.<sup>13</sup>

Continued reports of fracking fluid migrating into groundwater and incidents like the LeRoy Township blowout have added importance to the capabilities of government agencies that manage water resources, especially water withdrawals, which are essential for fracking operations.<sup>14</sup> In some jurisdictions, local water management authorities regulate withdrawals from water sources; in others, interstate water management commissions regulate them.<sup>15</sup> Interstate water commissions compensate for the limitations of the federal and state governments,<sup>16</sup> and their role in managing water resources will only increase as climate change affects weather patterns, precipitation, and drought.<sup>17</sup> This Comment argues that interstate water commissions should have a greater role in fracking

---

11. *Susquehanna River Basin Commission Information Sheet: Natural Gas Well Development in the Susquehanna River Basin*, SUSQUEHANNA RIVER BASIN COMM’N 2 (Jan. 2013), available at <http://www.srbc.net/programs/docs/NaturalGasInfoSheetJan2013.PDF> [hereinafter *SRBC Natural Gas Information Sheet*]; see also *A Fluid Situation: Typical Solution\* Used in Hydraulic Fracturing*, ENERGY IN DEPTH, available at <http://energyindepth.org/docs/frac-fluid.pdf> (last visited Dec. 21, 2014) (detailing the composition of water and chemical additives in typical fracking fluid).

12. See *Revised Draft: Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program*, N.Y. STATE DEP’T OF ENVTL. CONS. 1, 8 (2011), available at <http://www.dec.ny.gov/data/dmn/rdsgeisfull0911.pdf> (highlighting factors that can affect the amount of water necessary for fracking operations).

13. See *id.* (identifying the logistical issues of transporting water by truck or pipeline and storage).

14. See Zachary Lees, *Anticipated Harm, Precautionary Regulation and Hydraulic Fracturing*, 13 VT. J. ENVTL. L. 575, 576 (2012) (indicating that the migration of fracking fluid is the cause of increased reports of groundwater contamination near fracking operations).

15. See, e.g., *SRBC Overview*, *supra* note 9 (illustrating how the SRBC facilitates the management of the Susquehanna River’s resources between its three member states and the federal government).

16. See Emily Jeffers, Note, *Creating Flexibility in Interstate Compacts*, 36 ECOLOGY L.Q. 209, 222 (2009) (explaining how, as cooperative bodies, interstate commissions fill “the space between federal and state authority”).

17. See Noah D. Hall, *Interstate Water Compacts and Climate Change Adaptation*, 5 ENVTL. ENERGY L. POLY. J. 237, 239 (2010) (explaining that over 95% percent of the country’s freshwater resources cross state lines and are subject to the jurisdiction of an interstate water compact).

regulation and stronger authority to enforce their regulations. Moreover, this Comment asserts that a state should seek relief through its membership in an interstate water commission when fracking wastewater crosses state lines and pollutes its water supply.

Part I of this Comment surveys the development of fracking regulations and how the status quo, in which states are free to threaten and bring suit in federal courts, will not adequately address the water-related problems that can arise as a result of fracking. Part II analyzes how interstate water management commissions developed and focuses on the Delaware River Basin Commission (DRBC) and SRBC because their authorities and capabilities in the coordination and regulation of water resources are unique and more robust than other interstate water commissions in the country.<sup>18</sup> Part III focuses on the SRBC's enforcement authority and resolution procedures, arguing that states should enter into eastern-style compacts, with centralized administrative agencies structured like the DRBC and SRBC exercising broad authority over water quality and quantity issues and employing similar investigative and enforcement capabilities. In addition, Part III outlines opportunities for states affected by wastewater migration to seek relief through these commissions.

## I. BACKGROUND

### A. Background on Fracking Operations

Hydraulic fracturing for natural gas extraction is not a new technology,<sup>19</sup> but fracking was not particularly prevalent until the 1990s when drilling companies found they could access more gas deposits by drilling horizontally after drilling straight down for thousands of feet and then injecting high volumes of water at high pressure to fracture the shale.<sup>20</sup> The innovation of horizontal drilling combined with fracking has led to a proliferation of natural gas wells in places that were previously thought to be unfeasible or too expensive for drilling.<sup>21</sup> The rapid swell of fracking

---

18. Joseph W. Dellapenna, *Interstate Struggles Over Rivers: the Southeastern States and the Struggle over the 'Hooch*, 12 N.Y.U. ENVTL. L.J. 828, 839 (2005).

19. See *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1, 7 (Tex. 2008) (recognizing that fracking has been used commercially since 1949).

20. See John A. Harper, *The Marcellus Shale-An Old "New" Gas Reservoir in Pennsylvania*, 38 PA. GEOL. 2, 10 (2008), available at <http://www.marcellus.psu.edu/resources/PDFs/pageologydcnr.pdf> (identifying horizontal drilling and slick-water fracking, where large volumes of freshwater and sand are mixed with a friction reducing agent, in the Barnett Shale play in Texas as significant advances).

21. *Id.* at 5; see also Jason Schumacher & Jennifer Morrissey, *The Legal Landscape of "Fracking"*, 17 TEX. REV. L. & POL. 239, 241 (2013) (explaining how horizontal drilling and fracking have led to "one of the greatest energy booms this country has experienced").

operations and new well exploration has resulted in increased natural gas production to levels unseen since their peak in the 1970s, causing the U.S. Energy Information Administration (EIA) to double its estimates of the country's shale resources.<sup>22</sup> Some commenters call natural gas a “bridge fuel,” or an energy source that the United States can use as it transitions from fossil fuels to renewable energy like wind and solar power, because natural gas produces lower greenhouse gas emissions than fossil fuels.<sup>23</sup> Due in large part to the rapid increase in domestic fracking operations since 2008, the United States has surpassed Russia and Saudi Arabia as the largest producer of petroleum in the world.<sup>24</sup>

The fracking process engenders many risks related to water resources because it creates a myriad of fissures that release gas, and the chemical-laced fracking fluid injected deep into the shale can migrate unpredictably underground.<sup>25</sup> For example, although methane gas is naturally trapped underground and can migrate into groundwater or man-made water wells, fracking can accelerate the migration process and lead to water source contamination.<sup>26</sup> Proper treatment of wastewater is essential because drilling and injecting fracking fluid deep into the ground can release naturally occurring radioactive materials (NORM) that can return to the surface with the wastewater and natural gas.<sup>27</sup> Wastewater presents other disposal challenges because contact with minerals underground during the fracking process can increase the water's salinity to levels greater than in

---

22. CHEMICALS USED IN FRACKING, *supra* note 1, at 2.

23. See Hannah Wiseman, *Regulatory Adaptation in Fractured Appalachia*, 21 VILL. ENVTL. L.J. 229, 231 (2010) [hereinafter Wiseman, *Regulatory Adaptation*] (explaining the belief that low emissions from natural gas and increased production from new reserves will ease the United States' transition to more sustainable sources of energy).

24. Grant Smith, *U.S. Seen as Biggest Oil Producer After Overtaking Saudi Arabia*, BLOOMBERG.COM (Jul. 4, 2014), <http://www.bloomberg.com/news/2014-07-04/u-s-seen-as-biggest-oil-producer-after-overtaking-saudi.html>.

25. See, e.g., CHEMICALS USED IN FRACKING, *supra* note 1, at 2 (noting that improper enclosure and insulation of the well itself, called “casing,” could cause fracking fluid to escape the well closer to the surface and possibly contaminate underground drinking water supplies).

26. *Methane Migration into Occupied Buildings*, PA. DEP'T OF ENVTL. PROT. 1 (Apr. 2013), <http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-94847/8000-FS-DEP4309.pdf> (last visited Dec. 21, 2014).

27. GROUND WATER PROTECTION COUNCIL & ALL CONSULTING, U.S. DEP'T OF ENERGY, MODERN SHALE GAS DEVELOPMENT IN THE UNITED STATES: A PRIMER ES-4-5 (Apr. 2009), [hereinafter SHALE GAS PRIMER], available at [http://energy.gov/sites/prod/files/2013/03/f0/ShaleGasPrimer\\_Online\\_4-2009.pdf](http://energy.gov/sites/prod/files/2013/03/f0/ShaleGasPrimer_Online_4-2009.pdf) (explaining that many shale plays contain naturally occurring radioactive materials (NORM) of weak radiation levels and people will only encounter NORM at well pads, however, NORM can return to the surface during drilling, fracking, and gas production through wastewater); see also N.Y. STATE WATER RES. INST., *supra* note 5 (accentuating the importance of treating and disposing wastewater).

the ocean.<sup>28</sup> Options for disposing wastewater include transporting the wastewater to a water treatment facility, filtering and recycling it for future fracking operations, storing it in tanks either on-site or at another facility, injecting it into an underground storage well, or releasing it into a nearby body of water.<sup>29</sup> However, each option presents its own risks; for example, storing or transporting wastewater can lead to spills.<sup>30</sup> Although the northeastern United States experiences fairly sufficient rainfall and faces only occasional droughts in the summer, fracking's rapid expansion in places like Pennsylvania creates additional demands on already-strained water supplies.<sup>31</sup>

### *B. Limited Federal Oversight of Fracking-Related Water Issues*

A number of federal laws apply to the discharge of water and pollutants from fracking operations. For example, the CWA prevents oil and gas producers from discharging pollutants into navigable waters without a permit.<sup>32</sup> The CWA also set up the National Pollution Discharge Elimination System (NPDES), which is the permitting system for discharging water into navigable waterways.<sup>33</sup> Under the Safe Drinking Water Act (SDWA),<sup>34</sup> the U.S. Environmental Protection Agency (EPA) can regulate potential contaminants in drinking water through maximum contaminant levels and enforcing treatment procedures.<sup>35</sup>

However, these laws and regulations have limited reach. Congress has explicitly exempted injecting fluids, except diesel fuel, underground for

---

28. Michael Dillon, Comment, *Water Scarcity and Hydraulic Fracturing in Pennsylvania: Examining Pennsylvania Water Law and Water Shortage Issues Presented by Natural Gas Operations in the Marcellus Shale*, 84 TEMP. L. REV. 201, 208 (2011).

29. CHEMICALS USED IN FRACKING, *supra* note 1, at 2.

30. *Id.*; see MARY BETH ADAMS ET AL., USDA, NRS-76, EFFECTS OF DEVELOPMENT OF A NATURAL GAS WELL AND ASSOCIATED PIPELINE ON THE NATURAL AND SCIENTIFIC RESOURCES OF THE FERNOW EXPERIMENTAL FOREST *passim* (Jan. 2011), available at [http://www.fs.fed.us/nrs/pubs/gtr/gtr\\_nrs76.pdf](http://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs76.pdf) (describing the results of a study wherein U.S. Forest Service researchers applied wastewater to vegetation around a wellpad in a research forest where fracking operations occurred and found significant, immediate effects, including the death of many plants and trees, damage to tree bark, and early loss of fresh leaves from trees).

31. See Dillon, *supra* note 28, at 210 (explaining that droughts have increased over the past twenty-five years in the northeastern part of the country, and fracking has further stressed water supplies that were already strained by population and industrial growth).

32. 33 U.S.C. § 1311, 1342 (2012); see Wiseman, *Regulatory Adaptation*, *supra* note 23, at 242 (explaining the effects of the Clean Water Act (CWA) on oil and gas producers).

33. Schumacher & Morrissey, *supra* note 21, at 261.

34. 42 U.S.C. § 300f (2012).

35. See *United States v. Mass. Water Res. Auth.*, 256 F.3d 36, 38 (1<sup>st</sup> Cir. 2001) (explaining the Environmental Protection Agency's (EPA's) regulatory capabilities under the CWA).

fracking operations from the SDWA.<sup>36</sup> Additional pressure from Congress prompted the EPA to exempt hazardous wastes brought to the surface from oil and gas exploration and production from RCRA, which governs the disposal of hazardous wastes.<sup>37</sup> The Emergency Planning and Common Right to Know Act (EPCRA) exempts oil and gas producers from its reporting requirements regarding toxic chemical releases.<sup>38</sup> Although there are opportunities for the federal government to have a greater role in fracking regulation, it has largely left this key policy area to the states.<sup>39</sup>

### C. Primary Regulation by States

States have had to rush to adjust their regulatory regimes to deal with the hydraulic fracking boom. Some of the key issues states consider when developing regulatory regimes for fracking are well location, well casing, disclosure of fracking chemicals, land use restrictions, and application of their existing environmental laws.<sup>40</sup> States vary over how many inspectors they employ, which greatly affects their abilities to enforce their regulations and inspect wells.<sup>41</sup> Moreover, recordkeeping of violations is inconsistent and some states have noticed decreases in fracking violations for various reasons. For example, in Texas, this may be due to a hiring freeze and subsequent lack of inspectors.<sup>42</sup>

Some of the most active locations for fracking operations in the country

---

36. 42 U.S.C. § 300h (d)(1)(B)(ii) (2012); see Wiseman, *supra* note 23, at 243 (describing the ramifications of Congress exempting this activity from the SDWA and removing this authority from the EPA); see generally Editorial, *The Halliburton Loophole*, N.Y. TIMES, Nov. 3, 2009, [http://www.nytimes.com/2009/11/03/opinion/03tue3.html?\\_r=0](http://www.nytimes.com/2009/11/03/opinion/03tue3.html?_r=0) (explaining how this exemption, which prevents the EPA from regulating fracking under the SDWA, has been called the “Halliburton Loophole” for then-Vice President and former Halliburton Chief Executive Dick Cheney’s influence in putting that provision in the bill).

37. 42 U.S.C. § 6921(b)(2)(A) (2012); see Wiseman, *supra* note 23, at 243–45 (describing how the EPA determined that regulation of waste for oil and gas production and exploration would be “unwarranted,” and calling this carveout “the most substantial exemption for fracing (sic) operators from the perspective of activities at the surface”).

38. 42 U.S.C. § 11023(a) (2012); Wiseman, *supra* note 23, at 243.

39. See Schumacher & Morrissey, *supra* note 21, at 241, 260 (explaining that although fracking is regulated there is no “comprehensive [federal] regulatory scheme” for fracking, and it is unlikely that one will develop in the near future). Most federal regulation of fracking comes from various environmental statutes, such as the CWA, SDWA, and the CAA. *Id.* at 260.

40. See *id.* at 260–61 (identifying common concerns when states consider fracking regulations).

41. See Hannah Wiseman, *State Enforcement of Shale Gas Development Regulations, Including Hydraulic Fracturing* 15 (June 18, 2012) (forthcoming), available at <http://ssrn.com/abstract=1992064> (noting that in 2010, Michigan conducted almost 17,000 inspection of oil and gas wells, including shale gas, while Pennsylvania inspected about 1,400 shale wells).

42. *Id.* at 4, 7.



have been in Pennsylvania as the vast majority of the state covers the Marcellus Shale gas formation.<sup>43</sup> Fracking is still relatively new to this area. The first well in the Marcellus Shale play began production in Pennsylvania in 2005.<sup>44</sup> Since then, however, over 8,750 fracking wells have been drilled in Pennsylvania.<sup>45</sup>

Pennsylvania's neighbors, Maryland and New York, have taken different paths on the fracking issue. Until late 2014, both states had imposed de facto moratoria, under Democratic governors, as their respective governments studied the issue.<sup>46</sup> However, in November 2014, Maryland Governor Martin O'Malley announced that his administration would propose some of the toughest regulations in the country, which will ultimately allow fracking in the state.<sup>47</sup> Just a few weeks later, New York Governor Andrew Cuomo announced that his administration would ban fracking after a multi-year health study found "significant public health risks" related to fracking.<sup>48</sup> A key issue in the New York State fracking

43. Harper, *supra* note 20, at 4; *see also* SHALE GAS PRIMER, *supra* note 27, at 21 (highlighting that the Marcellus Shale is the country's "most expansive shale gas play, spanning six states in the northeastern U.S.").

44. SHALE GAS PRIMER, *supra* note 27, at 21.

45. PA. DEP'T OF ENVTL. PROT., OFFICE OF OIL & GAS MGMT., WEEKLY WORKLOAD REPORT, [http://files.dep.state.pa.us/OilGas/BOGM/BOGMPortalFiles/OilGasReports/2014/WEBSITE\\_Weekly\\_Report\\_for\\_Last\\_Week.pdf](http://files.dep.state.pa.us/OilGas/BOGM/BOGMPortalFiles/OilGasReports/2014/WEBSITE_Weekly_Report_for_Last_Week.pdf) (last visited Dec. 21, 2014) (providing weekly reports of total permits, inspections, and wells drilled for unconventional, i.e. fracking, and conventional oil and gas operations in Pennsylvania).

46. *See Marcellus Shale Safe Drilling Initiative*, MD. DEP'T OF THE ENV'T, <http://www.mde.state.md.us/programs/Land/mining/marcellus/Pages/index.aspx> (last visited Dec. 21, 2014) (describing how Governor O'Malley established the Marcellus Shale Safe Drilling Initiative to study the issue and deliver a final report with findings and recommendations); Jon Campbell, *As Other States Move Ahead, New York Remains Still on Fracking*, STARGAZETTE.COM, Sept. 22, 2013, <http://www.stargazette.com/article/20130922/NEWS11/309200072/As-other-states-move-ahead-New-York-remains-still-fracking> (highlighting New York and Maryland as two of the only states with shale plays, along with North Carolina, that had moratoria on fracking).

47. John Wagner, *O'Malley says he is ready to allow 'fracking' in Western Maryland, with strict safeguards*, WASHINGTON POST, Nov. 25, 2014, [http://www.washingtonpost.com/local/md-politics/omalley-says-he-is-ready-to-allow-fracking-in-western-maryland-with-strict-safeguards/2014/11/25/36234f34-74b9-11e4-9d9b-86d397daad27\\_story.html](http://www.washingtonpost.com/local/md-politics/omalley-says-he-is-ready-to-allow-fracking-in-western-maryland-with-strict-safeguards/2014/11/25/36234f34-74b9-11e4-9d9b-86d397daad27_story.html); *see Marcellus Shale Safe Drilling initiative Study—Part III: Final Report Findings and Recommendations*, MD. DEP'T OF THE ENV'T and MD. DEP'T OF NATURAL RES., (Nov. 25, 2014), [http://www.mde.state.md.us/programs/Land/mining/marcellus/Documents/Final\\_Distribution\\_Draft\\_11.25.14.pdf](http://www.mde.state.md.us/programs/Land/mining/marcellus/Documents/Final_Distribution_Draft_11.25.14.pdf) (reporting findings from a study that began in 2011 and presenting "recommendations for best practices for . . . natural gas exploration and production in the Marcellus Shale in Maryland").

48. Thomas Kaplan and Jesse McKinley, *Cuomo to Ban Fracking in New York State, Citing Health Risks*, N.Y. TIMES, Dec. 17, 2014, <http://www.nytimes.com/2014/12/18/nyregion/cuomo-to-ban-fracking-in-new-york-state-citing-health-risks.html?smid=fb-share&r=0>; *see A Public Health Review of high Volume*

debate was that New York City's water supply lies within the Marcellus Shale.<sup>49</sup> The City provides nearly one billion gallons of drinking water per day to over eight million city residents, commuters, and tourists, in addition to one million people in surrounding jurisdictions.<sup>50</sup> Varied approaches to the regulation of fracking, including bans in some states, could create future interstate conflicts.

*D. Continued Interstate Conflicts over Fracking Necessitate a Proper Dispute Resolution Mechanism*

Just as Maryland Attorney General Gansler threatened to sue after the LeRoy Township well blowout, another state attorney general, New York Attorney General Eric Schneiderman, has sought to use the courts to sort out fracking issues.<sup>51</sup> Some states have also levied fines for breaches of their laws by well operators in other states.<sup>52</sup> For example, in 2012, the New York DEC filed an administrative complaint and sought to fine U.S. Energy Development Corporation \$187,500 when runoff from its well pads and mining roads in Pennsylvania crossed into New York.<sup>53</sup> The potential for regulatory confusion and the spoiling of interstate relations caused by actions like DEC's could impair business in this country.<sup>54</sup> Conflicts over interstate waterway pollution will only continue as fracking operations proliferate.

---

*Hydraulic Fracturing for Shale Gas Development*, N.Y. DEP'T OF HEALTH, (Dec. 2014) [https://www.health.ny.gov/press/reports/docs/high\\_volume\\_hydraulic\\_fracturing.pdf](https://www.health.ny.gov/press/reports/docs/high_volume_hydraulic_fracturing.pdf) (presenting the results of the New York State Department of Health's health study, which it began in 2012).

49. See Letter from Carter H. Strickland, Jr., Comm'r, N.Y. City Dep't of Env'tl. Prot., to Joseph Martens, Comm'r, N.Y. State Dep't of Env'tl. Cons. (January 11, 2012) *available at*

[http://www.nyc.gov/html/dep/pdf/natural\\_gas\\_drilling/nycdep\\_comments\\_on\\_rdsgeis\\_for\\_hvhf\\_20120111.pdf](http://www.nyc.gov/html/dep/pdf/natural_gas_drilling/nycdep_comments_on_rdsgeis_for_hvhf_20120111.pdf) (highlighting a key issue that fracking operations near New York City's watershed could damage its unfiltered water supply as well as the system's infrastructure).

50. *Id.*

51. Press Release, Office of the Att'y Gen. of N.Y., A.G. Schneiderman to Sue Fed. Gov't Today for Failure to Study "Fracking" (May 31, 2011) *available at* <http://www.ag.ny.gov/press-release/ag-schneiderman-sue-federal-government-today-failure-study-%E2%80%9Cfracking%E2%80%9D> [hereinafter A.G. Schneiderman to Sue Fed. Gov't].

52. Complaint, N.Y. State Dep't of Env'tl. Cons., v. U.S. Energy Development Corp., No. 11-57 R9-201111104-150 (2012); Press Release, N.Y. State Dep't of Env'tl. Cons., DEC Seeks Fines of \$187,500 from U.S. Energy for Water Quality Violations in Allegany State Park Stream (Jan. 24, 2012) *available at* <http://www.dec.ny.gov/press/79850.html>.

53. *Id.*

54. See generally Felix Frankfurter & James M. Landis, *The Compact Clause of the Constitution—A Study in Interstate Adjustments*, 34 YALE L.J. 685, 697 (1925) (noting that, in the example of the New York Port Authority, an interstate compact serves to ameliorate the regulatory "confusion" that results from competing federal, state, and local interests).

## II. THE DEVELOPMENT OF INTERSTATE WATER MANAGEMENT COMMISSIONS

### A. Background Information on Interstate Water Commissions

Interstate water commissions derive their authority from compacts negotiated and approved by states that agree to collaborate and share resources to address common problems.<sup>55</sup> The compacts function like contracts between the signatory parties and are typically negotiated by state governors and relevant state environmental or water resource officials.<sup>56</sup> The U.S. Constitution requires that Congress ratify these compacts when they affect the relationship between the federal government and the states: “No State shall, without the Consent of Congress . . . enter into any Agreement or Compact with another State, or with a foreign Power.”<sup>57</sup> Moreover, interstate water compacts must receive Congressional approval because the Commerce Clause<sup>58</sup> gives Congress the authority to regulate navigable waters.<sup>59</sup> As a result, states are further committed to faithfully executing the compacts because Congressional approval gives a compact the full force of federal law, and Congress can stipulate its enforcement in federal court.<sup>60</sup>

Currently, there are thirty-six interstate water commissions,<sup>61</sup> but their authorities and management practices vary immensely because they developed at different times and have assumed different roles in the eastern

---

55. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-519, *INTERSTATE COMPACTS: AN OVERVIEW OF THE STRUCTURE AND GOVERNANCE OF ENVIRONMENTAL AND NATURAL RESOURCE COMPACTS I* (April 2007) [hereinafter U.S. GOV'T ACCOUNTABILITY OFFICE].

56. Hall, *supra* note 17, at 258; see CAROLINE N. BROUN ET AL., *THE EVOLVING USE AND CHANGING ROLE OF INTERSTATE COMPACTS: A PRACTITIONER'S GUIDE 2* (2006) (noting that compacts have the effect of contract and statutory law).

57. U.S. CONST. art. I, § 10, cl. 3; U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 55, at 1; see also Marlissa S. Briggett, Comment, *State Supremacy in the Federal Realm: The Interstate Compact*, 18 B.C. ENVTL. AFF. L. REV. 751, 757 (1991) (elucidating how states initially envisaged the compact clause as a means of resolving boundary disputes).

58. U.S. CONST. art. I, § 8, cl. 3.

59. BROUN ET AL., *supra* note 56, at 264; see generally *id.* at 262–63, 265 (noting that the earliest interstate water compact was probably the 1785 compact between Maryland and Virginia regarding the boundaries, management, and allocation of the Potomac River).

60. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 55, at 1; see Hall, *supra* note 17, at 254 (“Interstate compacts are essentially contracts between the states, subject to federal approval as provided in the U.S. Constitution. When approved by the Congress and signed by the President, interstate compacts have the full force and effect of federal law.”).

61. *Comprehensive Watershed Management and Planning Before the H. Subcomm. on Water Res. and Env't, H. Comm. on Transp. and Infrastructure*, 110th Cong. 6 (June 24, 2008) (statement of Carol R. Collier, Executive Director, Delaware River Basin Comm'n (DRBC)) *available at* [http://www.state.nj.us/drbc/library/documents/crc\\_testimony062408.pdf](http://www.state.nj.us/drbc/library/documents/crc_testimony062408.pdf) [hereinafter Collier statement].

and western parts of the United States.<sup>62</sup> For example, the western part of the country is more arid, so disputes over water allocation have historically been more common than in the east.<sup>63</sup> More importantly, the federal government would not allocate funding for dams and other water management programs to states with continued water allocation disputes.<sup>64</sup> As a result, western compacts generally focus on dividing up water resources between states, as opposed to facilitating collaboration.<sup>65</sup> Eastern compacts like the DRBC and SRBC deal with water allocation, but also focus more on water quality, pollution, and ecosystem management in their watersheds than western compacts.<sup>66</sup>

### B. *The Delaware River Basin Commission*

The Delaware River Basin provides water to about 15 million people, including New York City, which extracts nearly half of its water from reservoirs in the basin.<sup>67</sup> Numerous disputes over the allocation of the Delaware River's waters before the 1960s led to the creation of the DRBC.<sup>68</sup> In an early waterway dispute between New York and New Jersey regarding New Jersey's plans to route sewage into New York Harbor, Justice Clarke, writing for the Court, presciently advocated in dicta for an interstate water commission, stating that these problems would be "more likely to be wisely solved by cooperative study and by conference and mutual concession on the part of representatives of the States so vitally interested in it than by proceedings in any court however constituted."<sup>69</sup>

---

62. See Dellapenna, *supra* note 18, at 836–39 (explaining the historical and structural differences between compacts in the Eastern and Western parts of the country); Hall, *supra* note 17, at 255 ("Some interstate compacts, especially in the west, simply divide the waters by volume between the watershed states. Other interstate compacts, especially in the Great Lakes and east, provide for more comprehensive regulation and management of water uses.").

63. Dellapenna, *supra* note 18, at 836.

64. *Id.* at 836–37.

65. *Id.* at 837; see, e.g., U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 55, at 2 (pointing out that the Snake River Compact between Wyoming and Idaho delegates the "administrative responsibility" for allocating the amounts of water set in the compact to the officials who manage their respective state's water supplies); Jeffers, *supra* note 16, at 220 (explaining how the Colorado River Compact allocates the Colorado River's water based on a division between the upper and lower parts of the basin); see generally BROUN ET AL., *supra* note 56, at 268 (describing varying methods for water allocation in Western compacts).

66. Dellapenna, *supra* note 18, at 838.

67. *Basin Information*, DELAWARE RIVER BASIN COMM'N (Feb. 27, 2013), <http://www.state.nj.us/drbc/basin/> [hereinafter *Delaware Basin Information*]; Hall, *supra* note 17, at 288.

68. Collier statement, *supra* note 61.

69. *New York v. New Jersey*, 256 U.S. 296, 313 (1921).

As early as 1923, New York, New Jersey, and Pennsylvania attempted to form an interstate compact to manage the Delaware River.<sup>70</sup> However, continued attempts by New York City to divert water from the Delaware River led to *New Jersey v. New York*,<sup>71</sup> where the U.S. Supreme Court revisited its decision from 1931<sup>72</sup> involving a similar dispute regarding New York City's attempts to draw water from the Delaware River Basin.<sup>73</sup> The Court approved a consent decree between New Jersey and New York City and adopted a special master's report giving New York City the right to divert up to 800 million gallons of water per day (mgd) from the Delaware River as long as it maintained downstream flows and constructed certain dams and reservoirs.<sup>74</sup> Because the affected states were disappointed by the decision in *New Jersey v. New York II*,<sup>75</sup> they formed the Delaware River Basin Advisory Committee to discuss an alternative plan for managing the Delaware River Basin's resources.<sup>76</sup> After prolonged negotiations, in 1961, the legislatures in Delaware, New Jersey, New York, and Pennsylvania approved the final draft of the Delaware River Basin Compact without amendment.<sup>77</sup> The DRBC officially formed later that year after President Kennedy signed the Compact into law.<sup>78</sup>

The DRBC is composed of representatives appointed by the governors of Delaware, New Jersey, New York, and Pennsylvania.<sup>79</sup> The President also appoints a representative for the federal government;<sup>80</sup> currently the federal representative is the Commanding General and Division Engineer

---

70. Dellapenna, *supra* note 18, at 840.

71. 347 U.S. 995 (*New Jersey v. New York II*) (1954).

72. *New Jersey v. New York*, 283 U.S. 336, 343, 345–46 (*New Jersey v. New York I*) (1931) (adopting the recommendations of a special master allocating to 440 (mgd) to the New York City water supply on the condition that New York built a sewage treatment plant and subject to certain water flow amounts at certain points in New Jersey); *see* Dellapenna, *supra* note 18, at 885 (explaining that New York City sought to divert the Delaware River instead of the Hudson River, which would have been cheaper and closer to the City, because the Delaware's waters were unpolluted).

73. *Compare New Jersey v. New York II*, 347 U.S. at 995–96 with *New Jersey v. New York I*, 283 U.S. at 343, 345–46.

74. *New Jersey v. New York II*, 347 U.S. at 995–98.

75. *See id.* at 995 (noting that Pennsylvania and Delaware were also involved in the case).

76. Delaware River Basin Comm'n v. Bucks County Water & Sewer Auth., 545 F. Supp. 138, 140–42 (E.D. Pa. 1982) (detailing key events in the DRBC's history).

77. *Id.*

78. Delaware River Basin Compact, Pub. L. No. 87-328, 75 Stat. 688 (1961) [hereinafter Delaware Compact]; *see generally About DRBC*, DEL. RIVER BASIN COMM'N (Sept. 23, 2014), <http://www.state.nj.us/drbc/about/> (noting that this was the first time in U.S. history that states agreed to coordinate regulatory functions as equal partners with the federal government to manage a common resource.).

79. Delaware Compact § 2.2.

80. *Id.*

of the North Atlantic Division of the U.S. Army Corps of Engineers.<sup>81</sup> Each member has one vote, and any action before the commission must attain a simple majority of votes from the five members.<sup>82</sup> The DRBC employs a full-time staff that conducts water quality and conservation programs, regulatory review and permitting, drought management, and watershed planning, among other functions related to managing the Delaware River Basin.<sup>83</sup>

The Delaware Compact requires the DRBC to develop a comprehensive plan for managing the river basin's resources.<sup>84</sup> The Compact authorizes the DRBC to promulgate and enforce rules,<sup>85</sup> which are located in Chapter III of Title 18 of the Code of Federal Regulations;<sup>86</sup> however, the DRBC is not subject to the Administrative Procedures Act (APA).<sup>87</sup> The DRBC regulates surface and ground water withdrawals and diversions.<sup>88</sup> The DRBC may issue water withdrawal permits for persons, firms, or corporations that seek to divert or withdraw water for domestic, agricultural, or industrial uses.<sup>89</sup> To invoke this permitting power, the DRBC must first designate an area as "protected" after holding a public hearing to determine whether water withdrawals within a certain area of the basin would create a water shortage, or impair or conflict with the commission's comprehensive plan.<sup>90</sup> Notably, if a user obtains a permit or approval from a member state with an effective permitting system, then that use does not require DRBC approval for a water withdrawal in a

---

81. *Commissioners*, DEL. RIVER BASIN COMM'N, <http://www.state.nj.us/drbc/about/commissioners/> (last visited Dec. 21, 2014).

82. Delaware Compact § 2.5; *see* Dellapenna, *supra* note 18, at 844 (pointing out the curious fact that because the federal government has an equal vote with the member states, the federal government role can be subordinated to the states; however, Congress does retain some power by requiring a unanimous vote in certain situations and the power to amend the compact at any time without the other members' consent).

83. *See* Dellapenna, *supra* note 18, at 845 (explaining the various ways the DRBC carries out its regulatory authority).

84. Delaware Compact art. 3.

85. *Id.* § 14.2(a).

86. 18 C.F.R. pt. 400 (2012).

87. 5 U.S.C. § 551 (2012); *see* Delaware Compact § 15.1(m) (providing that the DRBC is not considered a federal agency under the Administrative Procedure Act (APA)).

88. Delaware Compact § 10.1. *But see id.* § 3.4 (announcing that the signatory parties agreed to waive any ability to modify the terms of the Court's New York v. New Jersey II decision thereby maintaining the quantities for diversion set by the Court's decision); BROUN ET AL., *supra* note 56, at 364 (noting that the DRBC's power over diversions is constrained because it must still abide by the diversions set out in New Jersey v. New York II).

89. Delaware Compact § 10.3.

90. Delaware Compact § 10.2; *see also* Dellapenna, *supra* note 18, at 845–46 (describing the DRBC's permitting authority and noting that under § 10.6 of the Compact, all permits are reviewable in "any court of competent jurisdiction").

designated protected area.<sup>91</sup> Federal district courts have original jurisdiction to review any DRBC decision, particularly concerning water withdrawals.<sup>92</sup>

Over the past few years, the DRBC has attracted controversy because its moratorium on water withdrawals for fracking operations has prevented natural gas development in the basin.<sup>93</sup> At their meeting on May 5, 2010, the DRBC commissioners unanimously directed their professional staff to develop draft regulations for comment regarding well pads, the well sites where natural gas drilling occurs.<sup>94</sup> The DRBC also postponed consideration of well pad dockets until final approval of these regulations.<sup>95</sup> On January 4, 2011, the DRBC published a notice of the issuance of Draft Regulations,<sup>96</sup> and the public comment period closed on April 15, 2011, with nearly 69,000 comments submitted.<sup>97</sup> The DRBC issued Revised Draft Regulations on November 8, 2011, and scheduled a meeting on November 21, 2011, to discuss them. However, after New York and Delaware announced they would vote against the Revised Draft Regulations,<sup>98</sup> the DRBC postponed that meeting to allow more time for review.<sup>99</sup>

On July 10, 2013, the DRBC's Chair, Michele Siekerka, the representative from New Jersey, issued a short statement regarding the progress of the DRBC's fracking rulemaking.<sup>100</sup> She asserted that she and

---

91. Delaware Compact § 10.3; Dellapenna, *supra* note 18, at 845–46.

92. Delaware Compact §§ 3.8, 15.1(p).

93. See Steve McConnell, *Governor Rips DRBC over Gas-Drilling Ban*, THE TIMES-TRIBUNE.COM, June 29, 2013, <http://thetimes-tribune.com/news/governor-rips-drbc-over-gas-drilling-ban-1.1513080> (describing Pennsylvania Governor Tom Corbett's frustration with the DRBC's delayed rulemaking and moratorium on fracking in the Delaware Basin).

94. *Natural Gas Drilling Index Page*, DEL. RIVER BASIN COMM'N (July 18, 2013), <http://www.state.nj.us/drbc/programs/natural/> (last visited Dec. 21, 2014).

95. *Id.*

96. Proposed Amendments to the Water Quality Regulations, Water Code and Comprehensive Plan to Provide for Regulation of Natural Gas Development Projects, 76 Fed. Reg. 295 (Jan. 4, 2011) (codified at 18 CFR pt. 410).

97. *Natural Gas Drilling Index Page*, *supra* note 94.

98. See Jon Campbell, *Martens: NY Likely to Vote 'No' on DRBC Regs*, DEMOCRAT AND CHRONICLE, (Nov. 9, 2011), <http://blogs.democratandchronicle.com/voteup/2011/11/09/martens-ny-likely-to-vote-no-on-drbc-regs/> (suggesting that New York will vote against the regulation because well operators would have to comply with DRBC and state regulations that could be inconsistent and lead to “confusion”); Letter of Gov. Jack A. Markell to DRBC, Nov. 17, 2011, <http://www.wdde.org/wp-content/uploads/2011/11/gov-fracking.pdf> (explaining that Delaware's vote against the regulations is based on concerns for how fracking upstream will affect Delaware's water quality and resources).

99. *Natural Gas Drilling Index Page*, *supra* note 94.

100. See Statement of Michelle Siekerka, Comm'n Chair, Del. River Basin Comm'n, (July 10, 2013), available at <http://www.state.nj.us/drbc/library/documents/statement-of-chair071013.pdf> [hereinafter Siekerka statement] (stating that since the issuing the Revised Draft Regulations, the DRBC staff and the staffs of the member states logged “thousands of

her colleagues in the DRBC and agencies of the member states “are continuing to confer in good faith and with forward momentum . . . to reach consensus on a path forward that provides for the development of a potentially valuable energy source while protecting the vital water resources within the [Delaware River] Basin.”<sup>101</sup> Currently, “there is no timeframe for when the draft regulations will again come up for a vote [before the Commission], which would occur at a public meeting.”<sup>102</sup>

### C. The Susquehanna River Basin Commission

From its source at Otsego Lake near Cooperstown, New York, the Susquehanna River runs 444 miles through Pennsylvania and Maryland until it flows into the Chesapeake Bay at Havre de Grace, Maryland.<sup>103</sup> The Susquehanna and its tributaries cover 27,510 square miles and contribute to about one-half of the Chesapeake Bay’s freshwater content.<sup>104</sup> The Marcellus Shale lies under about eighty-five percent of the Susquehanna River Basin.<sup>105</sup>

The SRBC was formed after President Nixon signed the Susquehanna River Basin Compact into law on December 24, 1970.<sup>106</sup> The legislatures of the three states in the basin—Maryland, New York, and Pennsylvania—had previously passed the Compact.<sup>107</sup> The governor of each state appoints a representative, and the federal government’s representative is the Commanding General and Division Engineer of the North Atlantic Division of the U.S. Army Corps of Engineers,<sup>108</sup> who is also the federal representative to the DRBC.<sup>109</sup> Each member has one vote, and unless unanimous consent is required, three affirmative votes are required for any

---

hours” poring over studies; reviewing best management practices; drafting minimum standards; performing water quality tests and monitoring water levels; and developing methods for evaluating the effects of fracking development on water resources); *see also* *Natural Gas Drilling Index Page*, *supra* note 94 (noting that the DRBC’s authority over water quantity and quality factored into the decision).

101. Siekerka statement, *supra* note 100.

102. *Natural Gas Drilling Index Page*, *supra* note 96.

103. *SRBC Overview*, *supra* note 9.

104. *Id.*

105. *SRBC Natural Gas Information Sheet*, *supra* note 11, at 1.

106. Susquehanna River Basin Compact, Pub. L. No. 91-575, 84 Stat. 1509 (1970) [hereinafter *Susquehanna Compact*] *available at* [http://www.srbc.net/about/srbc\\_compact.pdf](http://www.srbc.net/about/srbc_compact.pdf); *see SRBC Overview*, *supra* note 9 (highlighting the SRBC’s history).

107. *Id.*

108. Susquehanna River Basin Comm’n By-Laws, 2-1 [hereinafter *SRBC By-Laws*] *available at* <http://www.srbc.net/about/meetings/By-Laws%20and%20Procedures%20FINAL%2008-31-11.pdf>.

109. *See Commissioners and Alternates*, *supra* note 81.



action before the commission.<sup>110</sup> Although the member states contribute funding to the SRBC by direct allocations or grants, the SRBC derives about sixty-one percent of its revenue from various types of user fees.<sup>111</sup>

The Susquehanna Compact is very similar to the Delaware Compact in its structure and regulatory authority.<sup>112</sup> Like the DRBC, the SRBC coordinates the planning and water management of the member states in the Susquehanna River watershed, including water withdrawal permits, and it provides a forum through which the members can resolve water resource issues and controversies.<sup>113</sup> The Susquehanna Compact tasks the SRBC with formulating a comprehensive plan for the short-term and long-term development, management, and conservation of the basin's water resources.<sup>114</sup> The Compact grants rule-writing authority to the SRBC, using the same language as the Delaware Compact.<sup>115</sup> The SRBC promulgates its rules in Chapter VIII of Title 18 of the Code of Federal Regulations.<sup>116</sup> Like the DRBC, the SRBC is not subject to the APA, but it promulgates its rules through the notice and comment process, like federal agencies, to promote uniformity between the three member states and the federal government.<sup>117</sup>

The SRBC primarily regulates three things: diversions of water; consumptive use; and ground and surface water withdrawals.<sup>118</sup> The SRBC must approve any project on or crossing the boundary between any of the member states; any project involving "the diversion of water;" any project within the boundaries of a member state that the commission or the

---

110. SRBC By-Laws, 2-2; *see also id.* 2-6 (explaining how the SRBC annually elects a Chair and Vice-Chair from its membership; generally, the Chair and Vice-Chair rotate annually among the member jurisdictions); *id.* 3-1 (detailing the SRBC's Executive Director and professional staff, who carry out the SRBC's day-to-day operations).

111. *See Annual Report 2013*, SUSQUEHANNA RIVER BASIN COMM'N 15 *available at* <http://www.srbc.net/pubinfo/docs/AnnualReport2013SRBC.pdf> (last visited Dec. 21, 2014) (noting the SRBC's total revenue for Fiscal Year 2013 was \$14,094,409 with \$8,589,818 coming from "Consumptive Use Fees" and "Regulatory Fees").

112. Dellapenna, *supra* note 18, at 849.

113. SRBC By-Laws, 1-6. The SRBC retains the power over water withdrawals and diversions through § 11.3 of the Susquehanna Compact.

114. Susquehanna Compact § 3.

115. *Compare id.* § 15.2.1 (detailing the SRBC's authority to "Make and enforce reasonable rules and regulations for the effectuation, application, and enforcement of this compact") with Delaware Compact § 14.2(a) (detailing the DRBC's authority to "Make and enforce reasonable rules and regulations for the effectuation, application and enforcement of this compact"). *See also* Susquehanna Compact § 3.4(9) ("adopt, amend, and repeal rules and regulations to implement [the] compact.").

116. 18 C.F.R. pt. 800 (2012).

117. *See* BROWN ET AL., *supra* note 56, at 360 (explaining the SRBC's reasoning for following the notice-and-comment rulemaking process though the APA does not require it to do so).

118. Projects Requiring Review and Approval, 18 C.F.R. § 806.4 (2012).

appropriate regulator of a member state believes will have “a significant effect on water resources” within another member state; or any project that would have a significant effect on the SRBC’s comprehensive plan for water resources.<sup>119</sup> The SRBC’s authority for water withdrawal permits is nearly identical to the DRBC’s, including the requirement of designating an area as “protected” before the commission exercises its authority regarding water withdrawals.<sup>120</sup> However, the SRBC must have the “consent of the member or members from the affected state or states” when it designates protected areas, which allows it to regulate diversion and withdrawal permits.<sup>121</sup> Based on this provision, an SRBC member has greater power than a DRBC member because an SRBC member can effectively veto the affirmative votes of the other three members by voting against the designation of a protected area in its state. Like the DRBC, any determination of a protected area or permit for diversion or withdrawal can be challenged in any court of competent jurisdiction.<sup>122</sup> The SRBC’s authority to regulate water withdrawals within its basin has been challenged previously, but the Commonwealth Court of Pennsylvania, an intermediate appellate court, found that the Compact preempted a local regulatory authority’s attempts to condition an SRBC withdrawal approval.<sup>123</sup>

Though the SRBC and DRBC have similar regulatory authority, the SRBC takes a very different approach to fracking because it allows fracking well operators to withdraw water from the basin for fracking operations. On August 15, 2008, the SRBC’s executive director, Paul Swartz,<sup>124</sup> announced that the SRBC would require natural gas operators using “any amount of water withdrawn or consumptively used” within the Susquehanna watershed to obtain prior approval for the withdrawals from the SRBC.<sup>125</sup> Swartz acted pursuant to authority granted to him by the

---

119. Susquehanna Compact § 3.10 (2).

120. *Compare id.* art. 11 *with* Delaware Compact art. 10.

121. Susquehanna Compact § 11.2.

122. *Id.* § 11.6.

123. *State Coll. Borough Water Auth. v. Bd. of Supervisors of Halfmoon Twp.*, 659 A.2d 640, 644–45 (Pa. Commw. Ct. 1995) (proclaiming that the municipality’s attempts to condition the water withdrawal were “the very mischief the Commission was designed to remedy”).

124. *See generally* Press Release, Susquehanna River Basin Comm’n, SRBC Recognized Retiring Exec. Dir. Paul Swartz, Appointed New Exec. Dir. Andrew Dehoff, Approved 18 Project Applications, Delegated Certain Regulatory Matters to Exec. Dir. (Sept. 20, 2013), *available at* <http://www.srbcn.net/newsroom/NewsRelease.aspx?NewsReleaseID=114> (explaining how Executive Director Paul Swartz retired recently, and a new executive director, Andrew Dehoff, was appointed on September 19, 2013).

125. Press Release, Susquehanna River Basin Comm’n, SRBC to Require All Natural Gas Well Dev. Projects in Susquehanna Basin to Obtain Prior Approval Regardless of

SRBC's rules, which allow the executive director to require approvals for withdrawals or consumptive use from an entire class of projects if they could adversely affect the basin's resources.<sup>126</sup> The SRBC estimates that each shale gas well uses between four and five million gallons of water over a two to five day period.<sup>127</sup> Although natural gas fracking operations attract scrutiny for the amount of water they require, the SRBC estimates natural gas drilling operations require about 10.4 million gallons of water per day, which is about eleven percent of what power plants withdraw daily from the basin.<sup>128</sup> The SRBC expects that fracking operations at full capacity throughout the basin will use about thirty million gallons of water per day.<sup>129</sup>

Although the SRBC does not currently regulate the water-quality impacts of hydraulic fracturing, its permitting process would give it ample authority and opportunity to do so. The SRBC promulgated its approval by rule (ABR) process for consumptive water usage<sup>130</sup> related to natural gas development.<sup>131</sup> The ABR process allows the SRBC to track the sources of water transported to and from a site, quantities of water used, and flowback and produced fluids.<sup>132</sup> Before the SRBC approves any water withdrawal through its "docket approval" process, which is necessary for drilling to begin, the SRBC evaluates the potential for adverse impacts on water levels and flow, wildlife, and recreation activities in the basin.<sup>133</sup>

---

Amount of Water Used (Aug. 15, 2008) available at <http://www.srb.net/pubinfo/press/docs/ProjectRevNaturalGasDetermination81508.pdf>.

126. *Id.*; Projects that may require review and approval, 18 C.F.R. § 806.5(a)(4) (2012).

127. *SRBC Natural Gas Information Sheet*, *supra* note 11, at 1.

128. Scott Detrow, *Susquehanna River Basin Commission Weighs Issuing More Water Permits to Drillers*, STATE IMPACT PENNSYLVANIA, August 24, 2012, <http://stateimpact.npr.org/pennsylvania/2012/08/24/susquehanna-river-basin-commission-weighs-issuing-more-water-permits-to-drillers/> (comparing fracking water usage with water supply companies that withdraw about nine million gallons per day and manufacturing operations, which withdraw about eight million gallons per day).

129. *Id.*

130. Standards for Consumptive Uses of Water, 18 C.F.R. § 806.22(f) (2012); see Kevin J. Garber et al., *Water Sourcing and Wastewater Disposal: Two of the Least Worrisome Aspects of Marcellus Shale Development in Pennsylvania*, 13 DUQ. BUS. L.J. 169, 178–79 (2011) (clarifying that the SRBC requires consumptive use approvals through its approval by rule (ABR) process for water used in fracking operations because the water is injected into the ground and not returned to the basin).

131. 18 C.F.R. § 806.22(f).

132. *Id.*

133. *SRBC Natural Gas Information Sheet*, *supra* note 11, at 1; see Garber et al., *supra* note 130, at 178–79 (describing the SRBC's standards in the docket approval process, which can take between six months and a year); Hall, *supra* note 17, at 313 (explaining how the SRBC evaluates withdrawals based on "the reasonableness of the need, potential environmental impact, and potential adverse impact on other users" and requires that project sponsors adhere to minimum conservation standards).

The SRBC performs an essential function in issuing permits for water withdrawals and monitoring the potential effects of fracking operations in the basin. The SRBC manages the quantity of water flowing downstream from a water withdrawal site with “passby flow” requirements, which can force project sponsors to stop withdrawing water for fracking operations if nearby in-stream water levels are too low.<sup>134</sup> Indeed, on three occasions between April and July 2012, the SRBC enforced its passby flow restrictions and suspended 118 previously approved water withdrawals in various Pennsylvania and New York counties due to low stream levels in the basin.<sup>135</sup> Many of the same withdrawals were suspended on those three occasions and the suspension affected many different businesses, including not only golf courses and a fish hatchery, but also prominent natural gas companies like Chesapeake, Chevron, XTO, and Cabot Oil & Gas.<sup>136</sup>

#### *D. Critiques of Interstate Water Commissions*

Although interstate water commissions facilitate water management between states, they are not without critics.<sup>137</sup> Some believe that compacts are detrimental to states because by signing on to a compact, a state gives up some of its sovereignty in order to cooperate with other states and the federal government.<sup>138</sup> Some compacts have failed due to divergent ideas of water allocation and how much power each state would give up to a centralized commission.<sup>139</sup> Conflicts between neighboring states on the same commission can develop over differing state policy agendas.<sup>140</sup>

---

134. *SRBC Natural Gas Information Sheet*, *supra* note 11, at 3.

135. Press Release, Susquehanna River Basin Comm’n, Seventeen Water Withdrawals for Natural Gas Drilling and Other Uses Temporarily on Hold to Protect Streams (April 18, 2012) *available at* <http://www.srbcn.net/newsroom/NewsRelease.aspx?NewsReleaseID=83>; Press Release, Susquehanna River Basin Comm’n, 37 Water Withdrawals for Natural Gas Drilling and Other Uses Suspended to Protect Streams (June 28, 2012) *available at* <http://www.srbcn.net/newsroom/NewsRelease.aspx?NewsReleaseID=89>; Press Release, Susquehanna River Basin Comm’n, 64 Water Withdrawals for Natural Gas Drilling and Other Uses Suspended to Protect Streams (July 16, 2012) *available at* <http://www.srbcn.net/newsroom/NewsRelease.aspx?NewsReleaseID=90>.

136. *Id.*

137. *See* Dillon, *supra* note 28, at 203 (arguing that commissions like the DRBC and SRBC that operate under riparian principles “are not ideal for guarding against environmental harm as they codify the vagueness and uncertainty at the heart of the common law’s problems”).

138. *But see* Jeffers, *supra* note 16, at 228 (refuting this position by stating that federal involvement helps avoid question of federal preemption).

139. *See* Dellapenna, *supra* note 18, at 830–31 (describing the demise of the Apalachicola-Chattahoochee-Flint and Alabama-Coosa-Tallapoosa compacts due to differing views by the signatory party governments, namely Georgia and Florida in the Apalachicola-Chattahoochee-Flint compact, over the allocation of the water resources).

140. *See* McConnell, 93 note 97 (describing Pennsylvania Governor Tom Corbett’s frustration with the DRBC’s delayed rulemaking and moratorium on fracking in the

Indeed, Delaware's continued support of the DRBC moratorium has caused acrimony between it and neighboring Pennsylvania, a fracking state, to the point that at least one Pennsylvania official publicly described Delaware officials in pejorative, canine terms.<sup>141</sup>

The DRBC's moratorium on fracking, achieved through a delay in rulemaking, has drawn threats of lawsuits from both ends of the fracking debate. Some Pennsylvania landowners threatened to sue the DRBC because its moratorium prevented them from executing the leases they signed with natural gas drilling firms.<sup>142</sup> On the other side, New York Attorney General Eric Schneiderman attempted to sue the DRBC for not conducting a full environmental study before promulgating its proposed fracking regulations.<sup>143</sup> The suit was dismissed in U.S. District Court for lack of subject matter jurisdiction, however, the court held that the plaintiffs lacked standing because they could not show a real injury from the DRBC's proposed regulations, and the action was not ripe.<sup>144</sup> Still, some may choose to challenge a commission's authority through the courts; for example, any DRBC or SRBC decision, including water withdrawal permits, can be challenged in a U.S. district court.<sup>145</sup>

Compacts face additional hurdles due to the involvement of the federal government and Congress. For example, though the federal government is an equal member of the DRBC, it has only paid its portion of the DRBC's budget once since 1996—amounting to an estimated deficit of \$11,424,250.<sup>146</sup> Congressional approval of new compacts, which is required by the Constitution,<sup>147</sup> would seem increasingly unlikely given the hyper-partisan nature of the current Congress.<sup>148</sup> However, the prospects

---

Delaware River Basin).

141. See Susan Phillips, *Secretary Krancer Calls Delaware Officials "Dogs,"* STATEIMPACT PENNSYLVANIA, May 3, 2012, <http://www.stateimpact.npr.org/pennsylvania/2012/05/03/secretary-krancer-calls-delaware-officials-dogs/> (quoting former Pennsylvania Department of Environmental Protection Secretary Michael Krancer from remarks about Delaware officials: "Sometimes they smell like the tail of a dog").

142. Susan Phillips, *Frustrated Landowners Threaten to Sue DRBC Over Inaction on Gas Drilling,* STATEIMPACT PENNSYLVANIA, July 10, 2013, <http://stateimpact.npr.org/pennsylvania/2013/07/10/frustrated-landowners-threaten-to-sue-drbc-over-inaction-on-gas-drilling/>.

143. A.G. Schneiderman to Sue Fed. Gov't, *supra* note 51.

144. *New York v. U.S. Army Corps of Eng'rs*, 896 F. Supp. 2d 180, 195, 197 (E.D.N.Y. 2012).

145. Delaware Compact § 15.1; Susquehanna Compact Part 11, Sec. 2(a)(2)(o). Compare Delaware Compact § 3.8 with Susquehanna Compact § 3.10(6) ("subject to such judicial review in any court of competent jurisdiction").

146. *Budget*, DEL. RIVER BASIN COMM'N, (Jul. 16, 2014), <http://www.state.nj.us/drbc/about/budget.html>.

147. See BROWN ET AL., *supra* note 56, at 264 (stating that the Commerce Clause requires congressional approval of interstate water management compacts).

148. See Drew DeSilver, *Partisan Polarization, in Congress and Among Public is*

for federal funding of future compacts lifted during the 113<sup>th</sup> Congress as Congress passed and the President signed into law a bill that would restore dedicated, annual funding to the DRBC and SRBC.<sup>149</sup> Compacts have evolved over time, and interstate water commissions continue to be viable options for coordinating water management as evidenced by the recent creation of the Great Lakes-St. Lawrence River Basin Water Resources Council.<sup>150</sup>

### III. A GREATER ROLE FOR INTERSTATE WATER COMMISSIONS IN FRACKING REGULATION

With fracking operations increasing across the country, the risk mounts for another well blowout like the LeRoy Township incident in 2011.<sup>151</sup> Interstate water commissions like the DRBC and SRBC have been described as models for water management coordination.<sup>152</sup> The DRBC

---

*Greater than Ever*, PEW RESEARCH CENTER (July 17, 2013), <http://www.pewresearch.org/fact-tank/2013/07/17/partisan-polarization-in-congress-and-among-public-is-greater-than-ever/> (analyzing studies reporting that Republicans and Democrats in Congress are currently more polarized along ideological lines than in modern history, in part because congressional districts are increasingly gerrymandered to create “safe” districts with large proportions of the electorate from a single party).

149. *See* Water Resources Reform and Development Act of 2014, Pub. L. No. 113-121, § 4001, 128 Stat. (2014) (requiring the Secretary of the Army to annually allocate to the DRBC and SRBC to “an amount equal to the amount determined by the [respective] Commission in accordance with the respective interstate compact approved by Congress” and if the Secretary does not allocate proper funding, requiring him or her to provide Congress with reasons and the specific impacts of the lack of funding on nine factors); *see also* Press Release, Del. River Basin Comm’n, Senate Approves Legislation with Carper-Coons Language Directing Restoration of Fed. Funding to DRBC (May 20, 2013) [http://www.state.nj.us/drbc/home/newsroom/news/approved/20130520\\_wrda.html](http://www.state.nj.us/drbc/home/newsroom/news/approved/20130520_wrda.html) (noting that the Senate bill passed 83-4 with the amendment providing annual funding from the U.S. Army Corps of Engineers budget to the DRBC and SRBC).

150. *See* GREAT LAKES-ST. LAWRENCE RIVER BASIN WATER RES. COUNCIL, <http://www.glscompactcouncil.org/> (last visited Jan. 26, 2014) (noting that the Compact Council was created on December 8, 2008 after the legislatures of the eight Great Lakes states ratified the Compact and Congress consented, as well); *see also* Hall, *supra* note 17, at 259 (explaining that this compact creates a commission that researches and monitors the Great Lakes’ water resources, and it sets minimum water usage standards for the member states, but it leaves water withdrawal authority to the individual states).

151. *See* Laura Legere, *Wyoming County Well Malfunction Causes Spill, Evacuation*, THETIMES-TRIBUNE.COM, Mar. 15, 2013, <http://thetimes-tribune.com/news/wyoming-county-well-malfunction-causes-spill-evacuation-1.1458575> (explaining how three families were evacuated after a well blew out and spilled about 5,400 barrels of wastewater); Tina Jensen, *Fracking Fluid Blows out Nearby Well*, KASA.COM, Oct. 19, 2013, <http://www.kasa.com/news/local/fracking-fluid-blows-out-nearby-well> (describing how pressure from nearby fracking operations caused a traditional oil well to blow out and spill “more than 200 barrels of fracking fluid oil and water”).

152. Hall, *supra* note 17, at 321; *see* Jeffers, *supra* note 16, at 228 (noting that the DRBC has been an example for other eastern water allocation compacts because of its

and SRBC have the legal authority and ability to act while facilitating water usage and protecting water rights.<sup>153</sup> More states should enter into eastern-style compacts, creating water resource management commissions similar to the DRBC and SRBC, and settle future disputes related to fracking wastewater migration and water quality through their membership in interstate water commissions.

*A. Interstate Water Commissions Have the Authority and Resources Necessary for Resolving Disputes Between States*

Interstate compacts carry the full force of federal law, which gives states the opportunity to pursue actions that under other circumstances would be preempted by federal law.<sup>154</sup> With the federal government as a member, more resources are available to carry out a compact's goals.<sup>155</sup> Although many compact commissions rely on various funding streams, including allocations from their member states, grants from the federal government, and user fees,<sup>156</sup> having a variety of different funding sources can aid commission actions if one source lapses, like a state or federal budget impasse. Future interstate water commissions should be structured like the DRBC and SRBC, exercise broad authority over water quality and quantity issues, and employ similar investigative and enforcement capabilities.

*1. Authority Over Water Quality Issues*

The Delaware Compact authorizes the DRBC to “assume jurisdiction to control future pollution and abate existing pollution in the waters of the basin” if, after investigations and a public hearing, it determines that the comprehensive plan requires regulation.<sup>157</sup> Moreover, the member states agree to cooperate and enact any legislation pursuant to the compact and the comprehensive plan.<sup>158</sup>

Though they are similar, the DRBC and SRBC diverge over their

---

flexibility and focus on facilitating collaboration between members).

153. Hall, *supra* note 17, at 290, 314 (stating that the DRBC and SRBC have “the legal authority and resources to address new circumstances and stresses without severely disrupting water uses and rights”).

154. Briggett, *supra* note 57, at 765–66.

155. *Id.* at 763.

156. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 55, at 2.

157. Delaware Compact § 5.2.

158. *See id.* § 5.3 (“Each of the signatory parties covenants and agrees to prohibit and control pollution of the waters of the basin according to the requirements of this compact, . . . and in order to effect such object, agree to enact any necessary legislation . . . as may be as may be provided by the comprehensive plan.”); *see also Administrative Manual Part III – Water Quality Regulations*, DEL. RIVER BASIN COMM'N, available at <http://www.state.nj.us/drbc/library/documents/WQregs.pdf>.

approaches to regulating water quality because the SRBC has not asserted or confirmed its authority over water quality issues. The Susquehanna Compact has a provision delineating the SRBC's authority over "water quality and management and control," which is similar to § 5.2 of the Delaware Compact, discussed above.<sup>159</sup> Section 5 in the SRBC however, is worded differently from § 2 of the Delaware Compact, and the SRBC interprets § 5.2(b) of the Susquehanna Compact as leaving the primary role of managing water quality to the member states.<sup>160</sup> Unlike the DRBC, the SRBC asserts that there is currently "no justification for [it] to assume water quality jurisdiction."<sup>161</sup> Although anti-fracking activists continue to urge the SRBC to take a greater role in fracking regulation, the SRBC contends that its proper place is in monitoring water consumption in the basin.<sup>162</sup>

Despite its reluctance to do so, the SRBC should assert a greater role in water quality issues so it can better serve people living in the basin and carry out the terms of its compact and comprehensive plan. The Susquehanna Compact promotes this, stating that the SRBC's policy is "to encourage and coordinate the efforts of the signatory parties to prevent, reduce, control, and eliminate water pollution and to maintain water quality as required by the [SRBC's] comprehensive plan."<sup>163</sup> The Compact also states that the SRBC "shall recommend . . . standards of quality for any waters of the basin in relation to their reasonable and necessary use" to the member states.<sup>164</sup> Similarly, the SRBC's rules promote collaboration between the SRBC and member states for preventing water pollution based on water quality standards.<sup>165</sup> Furthermore, the SRBC's members agreed, "to prohibit and control pollution of the waters of the basin . . . and to

---

159. Compare Susquehanna Compact § 5 with Delaware Compact § 5.2.

160. Review and Approval of Projects, 77 Fed. Reg. 8095, 8096 (Feb. 14, 2012).

161. *Id.*

162. See Press Release, Susquehanna River Basin Comm'n, Commentary: Exec. Dir. Paul Swartz, Susquehanna River Basin Comm'n – SRBC Staying in its Lane, Studying Water Quantity (May 8, 2013) available at <http://www.srbc.net/newsroom/NewsRelease.aspx?NewsReleaseID=106> ("Despite some calls for us to make it an expansive environmental assessment, we are being responsible water managers by focusing in our areas of responsibility and scientific and technical expertise"); Susan Phillips, *SRBC Defends its Limited Role in Overseeing Water Quantity*, STATEIMPACT PENNSYLVANIA, May 8, 2013, <http://stateimpact.npr.org/pennsylvania/2013/05/08/srbc-defends-its-limited-role-in-overseeing-water-quantity/> (noting that anti-fracking advocates want the SBRC to undertake an expansive environmental analysis that factors in fracking operations in the basin, but SRBC Executive Director Swartz argued that the SRBC should not "stray out of its lane of expertise and mission").

163. Susquehanna Compact § 5.2(a).

164. *Id.* at § 5.2(c).

165. Water Quality, 18 C.F.R. § 801.7(d)(1) (2012).



cooperate faithfully in the control of future pollution in and abatement of existing pollution.”<sup>166</sup>

Although the SRBC maintains its deference to the member states’ regulation of water quality, in other instances the SRBC broadly interprets its regulatory authority. In the commentary of the ABR rules from 2006, the SRBC responded to a comment that it did not have authority over water withdrawals by saying:

This Comment reads the terms of the compact far too narrowly and fails to consider other broad grants of power given to the Commission to manage the river basin’s water resources. For example, Section 3.5(4) of the compact states that the Commission ‘shall assume jurisdiction in any matter affecting water resources whenever it determines . . . that the effectuation of the comprehensive plan or the implementation of the compact so requires.’<sup>167</sup>

Moreover, the SRBC claimed that § 3.4(9) of the Susquehanna Compact allows it to “exercise all powers necessary or convenient to carry out its express powers and other powers which reasonably may be implied therefrom.”<sup>168</sup> These broad interpretations of authority were published in the same commentary in which the SRBC espoused its seemingly contrary belief that states have the primary role in regulating water quality.<sup>169</sup>

## 2. *The Susquehanna River Basin Commission’s Enforcement Authority*

Although the SRBC has not asserted its authority over water quality, its rules provide a variety of options for conducting water quality enforcement actions. The SRBC, through its employees or agents, can investigate any person’s or project’s compliance with any provisions of the Compact or the SRBC’s regulations, approvals, or other requirements.<sup>170</sup> It can inspect all areas where the project is being operated, including methods of operation and any records relevant to the subject of the investigation.<sup>171</sup> The SRBC may investigate the effects of current and future operations and new materials on the present and future water quality in the basin.<sup>172</sup>

Surface and groundwater withdrawals must comply with standards at 18 C.F.R. § 806.23. This rule allows the SRBC to deny, limit, or condition an approval “to ensure that the withdrawal will not cause significant adverse

---

166. Susquehanna Compact § 5.3.

167. Review and Approval of Projects; Special Regulations and Standards; Hearings and Enforcement Actions, 71 Fed. Reg. 78,570 (Dec. 29, 2006) (codified at C.F.R. 803–808).

168. *Id.*

169. See *supra* notes 160–162 and accompanying text.

170. Investigative Powers, 18 C.F.R. § 808.12 (2012).

171. *Id.*

172. Susquehanna Compact § 5.1(a).

impacts to the water resources of the basin.”<sup>173</sup> For example, the SRBC exercised this authority when it denied Anadarko E&P Company LP’s groundwater withdrawal application for a natural gas well.<sup>174</sup> In this denial the SRBC cited “the problematic nature of the proposed groundwater withdrawal in a small headwaters stream watershed.”<sup>175</sup> Anadarko appealed the denial, and the SRBC voted to table the appeal so it could “negotiate in good faith toward a resolution” with Anadarko.<sup>176</sup> Anadarko eventually withdrew its appeal, and the SRBC agreed to Anadarko’s “Stipulation of Settlement and Withdrawal of Appeal.”<sup>177</sup> Although the SRBC has denied water withdrawal applications based on water quantity concerns, as the Anadarko case shows, 18 C.F.R. § 806.23(b)(2) envisages other adverse impacts like “water quality degradation that may be injurious to any existing or potential water use.”<sup>178</sup>

Because 18 C.F.R. § 806.23(b)(2) allows the SRBC to deny withdrawals due to concerns about adverse impacts, like “water quality degradation,” the SRBC should utilize its authority over water quality and pursue enforcement actions whenever a well blows out and wastewater flows into a body of water in the basin. The SRBC’s Executive Director can issue a Notice of Violation, or, if there are exigent circumstances, the Executive Director can order an alleged violator to cease and desist the allegedly violative activity.<sup>179</sup> The SRBC can hold a show cause proceeding where an alleged violator would have to show cause as to why a penalty assessed by a prosecuting officer pursuant to § 15.17 of the Compact should not apply.<sup>180</sup> When assessing the amount of any civil penalty, the SRBC has to take into account certain criteria, including the duration of the violation and the amount of water that was used.<sup>181</sup> The rules also provide the alleged violator with the opportunity to settle the charges brought up at the

---

173. Standards for Water Withdrawals, 18 C.F.R. § 806.23(b)(2) (2012).

174. *Minutes of the Susquehanna River Basin Commission: December 15, 2011*, SUSQUEHANNA RIVER BASIN COMM’N 8 (Feb. 29, 2012), [http://www.srbc.net/about/meetings/minutes/Minutes%2012\\_15\\_2011%20w%20Attachments.pdf](http://www.srbc.net/about/meetings/minutes/Minutes%2012_15_2011%20w%20Attachments.pdf).

175. *Id.*

176. *Minutes of the Susquehanna River Basin Commission: June 7, 2012*, SUSQUEHANNA RIVER BASIN COMM’N 6 (July 13, 2012), [http://www.srbc.net/about/meetings/minutes/Minutes%206\\_07\\_12.pdf](http://www.srbc.net/about/meetings/minutes/Minutes%206_07_12.pdf) (noting that the SRBC unanimously voted to table action on Anadarko’s appeal until the following meeting in September 2012).

177. *Minutes of the Susquehanna River Basin Commission: March 21, 2013*, SUSQUEHANNA RIVER BASIN COMM’N 6 (June 5, 2013), <http://www.srbc.net/about/meetings/minutes/Minutes032113wexhibits.pdf>.

178. See *supra* note 178 and accompanying text.

179. 18 C.F.R. §§ 808.13–14 (2012).

180. Show Cause Proceeding, 18 C.F.R. § 808.15 (2012).

181. Civil Penalty Criteria, 18 C.F.R. § 808.16 (2012).

enforcement proceeding.<sup>182</sup> Indeed, settlements are the SRBC's "primary means of carrying out enforcement actions."<sup>183</sup> For example, the SRBC recently approved a settlement of \$90,000 "in lieu of civil penalty" with Carrizo (Marcellus) LLC for its "various operations in the Susquehanna River Basin."<sup>184</sup> The SRBC should place greater emphasis on "adverse environmental harm" and impose penalties on well operators pursuant to the water withdrawal and consumptive use regulations when wastewater migrates into bodies of water within the basin.<sup>185</sup>

The DRBC provides additional examples of enforcement capabilities for future interstate water commissions. The DRBC's rules outline the commission's authority to impose penalties or negotiate settlements with persons who violate provisions of the Delaware Compact or the DRBC's regulations.<sup>186</sup> The DRBC can also impose penalties on those who violate its regulations related to specific uses in flood plain regulations.<sup>187</sup> Moreover, the DRBC can impose penalties on violators of its additional water restrictions in the parts of Pennsylvania it designated as the "Southeastern Pennsylvania Water Protected Area."<sup>188</sup> Interstate water commissions should be proactive in protecting parts of their watersheds when necessary and should have the authority to assess penalties on violators of their regulations.

---

182. Settlement by Agreement, 18 C.F.R. § 808.18 (2012).

183. SUSQUEHANNA RIVER BASIN COMM'N, POLICY NO. 2000-01, POLICY & GUIDANCE STATEMENT FOR THE SETTLEMENT OF CIVIL PENALTIES/ENFORCEMENT ACTIONS 1 (Feb. 10, 2000), available at [http://www.srbc.net/policies/docs/Policy%202003\\_02.pdf](http://www.srbc.net/policies/docs/Policy%202003_02.pdf).

184. *Report on June 20, 2013, Commission Meeting and Public Hearing*, SUSQUEHANNA RIVER BASIN COMM'N 1 (July 3, 2013), [http://www.srbc.net/about/meetings/MeetingReports/\\_MtgReport062013.pdf](http://www.srbc.net/about/meetings/MeetingReports/_MtgReport062013.pdf); see *ABOUT CARRIZO: Company Bio*, CARRIZO OIL AND GAS, <http://www.crzo.net/company-bio> (last visited Jan. 25, 2014) (describing Carrizo's oil and gas production operations in shale plays around the country, including the Marcellus Shale). But see Collin Eaton, *Carrizo Oil & Gas to sell off Barnett Shale assets and focus on oil*, FUELFIX.COM, Sept. 4, 2013, <http://fuelfix.com/blog/2013/09/04/carrizo-oil-gas-to-sell-off-barnett-shale-assets-and-focus-on-oil/?cmpid=eefl> (reporting that Carrizo included its assets in the Marcellus Shale as part of a \$268 million deal, through which Carrizo hopes to focus on its assets in the Eagle Ford shale play and oil in South Texas).

185. See SUSQUEHANNA RIVER BASIN COMM'N, POLICY NO. 2003-02, PROCEDURAL GUIDELINES FOR ADDRESSING COMPLIANCE WITH DOCKET CONDITIONS 1 (Aug. 14, 2003), available at [http://www.srbc.net/policies/docs/Policy%202003\\_02.pdf](http://www.srbc.net/policies/docs/Policy%202003_02.pdf) (stating "adverse environmental harm" as one of the three considerations the SBRC assesses regarding violations of water withdrawal and consumptive use regulations).

186. See Assessment of a Penalty, 18 C.F.R. § 401.95 (2012); Settlement by Agreement in Lieu of Penalty, 18 C.F.R. § 401.98 (2012).

187. See Basin Regulations—Flood Plain Regulations, 18 C.F.R. pt. 415 (2012).

188. See Groundwater Protection Area: Pennsylvania, 18 C.F.R. pt. 430 (2012).

*B. States Should Utilize Their Membership in Interstate Water  
Commissions to Resolve Disputes*

Members of the DRBC and SRBC have an equal vote, giving them the ability to voice their concerns regarding their shared water resources on equal footing with the federal government.<sup>189</sup> States may prefer to negotiate through interstate compacts where they have an equal vote and can negotiate with other states that also have a vested interest in caring for the region's resources.<sup>190</sup> Indeed, interstate water commissions function differently from other federal agencies or Congress, where decisionmakers may be from across the country and not familiar with local or regional issues.<sup>191</sup>

The DRBC and SRBC are examples of commissions through which a member state can seek relief if its waterways are polluted. The SRBC's promulgated rules provide options for a member state affected by fracking wastewater pollution from another state. For example, any SRBC member can request a public hearing before the SRBC on any subject, particularly issues related to public health or environmental protection.<sup>192</sup> Any person who feels aggrieved by a DRBC or SRBC decision, which would include a water withdrawal approval, can file a petition requesting a hearing on that decision.<sup>193</sup> The DRBC's and SRBC's rules outline hearing procedures, including the appointment of a hearing officer who prepares a report with findings and recommendations for the respective commission to act upon.<sup>194</sup>

Even after it approves a project, upon its own motion or the petition of an interested party, the SRBC can "reopen" any project approval to modify it or to impose additional conditions to protect public health or water resources.<sup>195</sup> To reopen a petition the petitioning party must show, by a preponderance of the evidence, that the project poses a significant adverse impact or threat to public health.<sup>196</sup> As any member of the SRBC can request a public hearing on a subject, particularly issues relating to public

---

189. Briggett, *supra* note 57, at 764; *see* Delaware Compact § 2.5; Susquehanna Compact § 2.5.

190. Briggett, *supra* note 57, at 767.

191. *Id.*

192. Public Hearings, 18 C.F.R. § 808.1 (2012).

193. *Compare* Hearings Generally, 18 C.F.R. § 401.81(c) (2012) *with* Administrative Appeals, 18 C.F.R. § 808.2 (2012) (specifying that a person can request a stay of the decision).

194. *Compare* 18 C.F.R. §§ 401.83–89 (2012) *with* Hearings on Administrative Appeal, 18 C.F.R. § 808.3 (2012).

195. Reopening/Modification, 18 C.F.R. § 806.32(a) (2012).

196. *Id.*

health or environmental protection,<sup>197</sup> a member state can request a hearing on a water withdrawal or petition to “reopen” any project approval and seek its revocation. Moreover, the SRBC’s water withdrawal standards<sup>198</sup> provide an opportunity for a member state to force the SRBC to act when it has been affected by fracking wastewater migrating from another state if that migration rises to the level of an adverse impact such as “water quality degradation that may be injurious to any existing or potential water use.”<sup>199</sup>

### *C. Benefits of Pursuing Resolution Through Interstate Water Commissions*

Interstate compacts are inherently power-sharing agreements where no single member dominates.<sup>200</sup> Compacts facilitate coordination between states and the federal government on issues that are not confined to political boundaries.<sup>201</sup> Compacts can alleviate uncertainty that may occur when various municipalities and states promulgate regulations based on their localized interests.<sup>202</sup> Future interstate water compacts that create commissions can coordinate resources and develop regulations that apply to all entities in the watershed, which will promote greater coordination and consistency of regulations.<sup>203</sup>

Although not all compact commissions employ full-time staff,<sup>204</sup> future compacts should create commissions employing full-time staff to effectively carry out the compact’s provisions. Eastern-style compacts that create commissions, like the DRBC and SRBC, are preferable because, through coordination between member states, the commissions can alter their regulations and procedures to adjust to new regional problems.<sup>205</sup> The DRBC and SRBC have a wealth of institutional knowledge and data with which they can make informed decisions when resolving disputes because they have the authority to monitor water flows, conduct research, and

---

197. See *supra* note 192 and accompanying text.

198. 18 C.F.R. § 806.23.

199. Standards for Water Withdrawals, 18 C.F.R. § 806.23(b)(2) (2012).

200. *Hess v. Port Auth. Trans-Hudson Corp.*, 513 U.S. 30, 47 (1994) (“[N]o one State alone can control the course of a Compact Clause entity.”).

201. *Id.* at 40 (stating that compacts are unique because they address problems on a regional basis as opposed to confining action based on state or national boundaries).

202. See *supra* note 54 and accompanying text.

203. See U.S. GOV’T ACCOUNTABILITY OFFICE, *supra* note 55, at 12 (stating that eight compacts require their member states’ agencies to develop and consent to regulations).

204. See *id.* at 4 (noting the results of a study in which only eight out of the forty-six compacts with commissions clearly require staff, but thirty-four of the compacts studied allow the commissions to employ staff).

205. Jeffers, *supra* note 16, at 220; see BROUN ET AL., *supra* note 56, at 261 (positing that states benefit from the flexibility provided by compacts that focus on environmental and natural resources issues).

collect data on water usage and quality.<sup>206</sup>

Existing and future commissions should develop alternative dispute resolution (ADR) procedures. Only about a quarter of interstate commissions focusing on environmental and natural resource issues currently outline dispute resolution procedures outside of litigation.<sup>207</sup> Because litigation can be prohibitively expensive, commissions that provide ADR procedures such as administrative appeals, arbitration, mediation, or negotiation can be attractive venues for states.<sup>208</sup>

Litigation in any venue is unlikely to satisfy the interests of the parties.<sup>209</sup> States may consider resolving disputes before the Supreme Court through its original jurisdiction over controversies between the states,<sup>210</sup> but this may lead to unsatisfactory outcomes. The Court is often ill-equipped to deal with such particularized, interstate disputes, so it usually appoints a Special Master to oversee fact-finding without much direction or oversight.<sup>211</sup> Other downsides to pursuing litigation between states include the limited scope of inquiry, dependence on a court record, and inability to consider the realities of the dispute.<sup>212</sup> Dissatisfaction with the Court's decision in *New Jersey v. New York II* led to the creation of the DRBC.<sup>213</sup>

Over the past fifty years, the DRBC has proven to be an effective venue through which states can resolve water disputes without going through litigation.<sup>214</sup> Moreover, the DRBC and SRBC have the enforcement capabilities as well as resolution procedures that can effectively resolve disputes between member states and entities operating within their

---

206. See Hall, *supra* note 17, at 289, 313 (describing the authorities granted to the DRBC and SRBC, respectively, by their similar compacts).

207. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 55, at 4.

208. See *id.* at 10 (describing the alternate dispute resolution options commissions provide that can be attractive alternatives to costly litigation).

209. Jeffers, *supra* note 16, at 211; see also BROUN ET AL., *supra* note 56, at 267 (arguing that compact commissions that allocate water rights provide greater flexibility and, therefore, are preferable to allocations decided by courts).

210. U.S. CONST. art. III, § 2.

211. Jeffers, *supra* note 16, at 220.

212. *Texas v. Florida*, 306 U.S. 398, 428 (1939) (Frankfurter, J., dissenting) (describing the impractical aspects of the litigious process in resolving interstate disputes); see Jeffers, *supra* note 16, at 232–33 (2009) (highlighting cases over eighty years apart where the Court indicated that Congress would be better suited to resolve certain interstate disputes).

213. See *supra* notes 78–81 and accompanying text.

214. See CAROL R. COLLIER, RIVER BASIN COMMISSIONS: AN ALTERNATIVE TO INTERSTATE WATER WARS, DECEMBER 2007, available at <http://www.state.nj.us/drbc/library/documents/CRC12-07OpEd.pdf> (last visited Sept. 25, 2013) (explaining how the DRBC succeeded in an early test of its ability to resolve interstate water disputes when the members agreed to “Good Faith Negotiations” instead of pursuing litigation during a prolonged period during in the 1960s).

respective river basins.<sup>215</sup> Although Maryland Attorney General Gansler achieved a settlement with Chesapeake Energy over the LeRoy Township incident,<sup>216</sup> there is no guarantee that a state will be able to achieve similar success through litigation or settling with a fracking operator. The SRBC's enforcement and resolution powers are examples for how a state can seek relief when wastewater from another state pollutes its waterways.<sup>217</sup> Existing and future interstate water commissions should have the regulatory authority and dispute resolution procedures, as exemplified by the DRBC and SRBC, for a member state to seek relief when wastewater from another state pollutes its water resources.

### CONCLUSION

Fracking has proliferated across the country over the past decade.<sup>218</sup> Sometimes wastewater and chemicals from fracking operations can pollute nearby groundwater or waterways and even cross into other states. Interstate water commissions coordinate the water management operations of states that share waterways. They exist in various forms and have differing authorities, but often the member states have equal voting power along with a representative from the federal government. More states should enter into eastern-style interstate compacts because the commissions that they create are often more sensitive to local concerns, can narrowly tailor their regulations to local and regional needs, and they can utilize federal resources.<sup>219</sup> Because each state on one of these commissions has a vote, an affected state should seek relief from the commission. Interstate water commissions should have greater enforcement authority and a more prominent role in the fracking debate. When fracking wastewater crosses into and contaminates the water supply of another state, that state should seek relief through its membership in an interstate water management commission.

---

215. See U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 55, at 24 (noting that the DRBC often employs mediation to resolve disputes and the SRBC often negotiates with entities that violate its regulations).

216. AG Gansler Secures Funding, *supra* note 8.

217. See *supra* Part III.A.2.

218. See Daniel Yergin, *Congratulations America. You're (Almost) Energy Independent. Now What?*, POLITICO MAGAZINE, November 2013, available at [http://www.politico.com/magazine/story/2013/11/congratulations-america-youre-almost-energy-independent-now-what-98985.html?ml=m\\_a2\\_1](http://www.politico.com/magazine/story/2013/11/congratulations-america-youre-almost-energy-independent-now-what-98985.html?ml=m_a2_1) (noting that shale gas production has grown from 2% of total U.S. natural gas production to 44% in 2013).

219. See Briggett, *supra* note 57, at 753 (insisting that interstate compacts can be "a valuable intermediate level of regulation between intrusive federal control and ineffective state control").