

BEFORE THE GREAT LAKES – ST. LAWRENCE
RIVER BASIN WATER RESOURCES THE COMPACT COUNCIL

In re:

City of Waukesha

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DIVERSION HEARING NO. 2016-1

OPINION

May 4, 2017

Table of Contents

I. Statement Of The Case. 1

II. The Compact Council Established Procedures To Govern The Hearing Process. . 4

III. The Compact Council Reached The Merits Notwithstanding Uncertainty That The Cities Initiative Is A “Person Aggrieved” By The Final Decision. 8

IV. Limited Supplementation Of The Administrative Record Is Appropriate..... 10

V. The Compact Council Properly Issued The Final Decision Without Allowing Additional Public Comment. 13

VI. The Compact Council Did Not Err In Designating The Area To Which The City Of Waukesha May Provide Water Supply Service With Lake Michigan Water.. 16

VII. The Compact Council Applied The Correct Legal Standard To Determine Whether Waukesha Has A “Reasonable Water Supply Alternative” To Great Lakes Water. 21

VIII. The Compact Council Correctly Concluded, As A Matter Of Fact And Based On The Record, That Waukesha Does Not Have A “Reasonable Water Supply Alternative” To Great Lakes Water. 28

 A. Water Supply Demand. 30

 B. Deep Aquifer Sustainability. 31

 C. Radium Contamination..... 33

 D. Environmental Impacts To Surface Water Resources From A Groundwater Alternative. 34

 E. Hydrological Interconnection..... 35

 F. Split System Alternative..... 36

IX. The Compact Council Properly Evaluated If The Need For All Or “Part Of” The Proposed Diversion Could Be Reasonably Avoided. 37

X. The Compact Council Properly Determined That The Return Flow Of Water To Lake Michigan Through The Root River Would Not Have Significant Adverse Impacts..... 39

XI. The Compact Council Properly Considered Cumulative Impacts And The Precedent-Setting Consequences Of The Final Decision. 48

XII. Conclusion 51

I. Statement Of The Case.

On June 21, 2016, this body, the Great Lakes – St. Lawrence River Basin Water Resources Compact Council (“The Compact Council”) issued its Final Decision (“Final Decision”) pursuant to the Great Lakes – St. Lawrence River Basin Water Resources Compact (“Compact”) allowing a diversion of water from Lake Michigan to the City of Waukesha, Wisconsin (“Waukesha”). Although located outside of the Great Lakes – St. Lawrence River Basin (“Basin”), Waukesha is part of a county that straddles the Basin’s boundary and is thus eligible under Section 4.9.3 of the Compact to request an exception to the Compact’s prohibition on diversion of Basin waters. On August 19, 2016, the Great Lakes and St. Lawrence Cities Initiative (“Cities Initiative”) submitted a Request for Hearing pursuant to Section 7.3.1 of the Compact asking the Compact Council to review its Final Decision. Waukesha was granted leave to intervene in the hearing as a party-respondent.

The parties completed briefing on the Cities Initiative’s right to a hearing and the merits of the Cities Initiative’s objections to the Final Decision on February 6, 2017. The Compact Council heard oral argument on March 20, 2017. After considering the briefs and oral argument of the parties, at a continuation of its public hearing session on April 20, 2017, the Compact Council unanimously decided that the Cities Initiative had not met its burden of proving that the Final Decision was based on erroneous findings of fact, conclusions of law or an abuse of discretion that warrants opening or modifying it. This Opinion (a) sets forth the reasons for the Compact Council’s April 20, 2017 decision and denies the Cities Initiative’s request to open or modify the Final Decision, (b) grants in part and denies in part the Cities Initiative’s request to supplement the Compact Council’s administrative record, and (c) explains that the Compact Council reached the merits of the Cities Initiative’s arguments notwithstanding uncertainty that

the Cities Initiative has shown itself to be a “person aggrieved” by the Final Decision and thereby entitled to a hearing under Section 7.3.1 of the Compact.

As discussed more fully in the Final Decision and Section II below, the public process leading to the Final Decision was lengthy and extensive, involving proceedings before and consideration by the State of Wisconsin, the Great Lakes – St. Lawrence Water Resources Regional Body (“Regional Body”) and the Compact Council. The Compact Council found many of the comments from Tribal Governments and the public to be of considerable value, and took them into account in developing the conditions and other terms in the Final Decision. The Compact Council shares the interest of Tribal Governments and the public in protecting and conserving the waters of the Basin, and supports and encourages the participation of both Tribal and public members in the Compact Council public proceedings.

Several factors were of particular importance in approving the diversion of water to Waukesha under the terms of the Final Decision. As reflected in paragraph 7 of the Final Decision, Waukesha “will return up to the previous year’s average daily withdrawal amount per day, and therefore, a volume of water approximately equal to the volume of water withdrawn from Lake Michigan will be returned to the Lake Michigan watershed” (footnote omitted). This goes beyond the requirement in Section 4.9.4.c. of the Compact that all water withdrawn shall be returned, “less an allowance for Consumptive Use.” As a result, approval of Waukesha’s Application will not diminish the quantity of Basin waters available for other uses.

Indeed, approval will eliminate an ongoing withdrawal diminishing Basin waters. As cited in Sub-Finding 11.a of the Final Decision, because the deep aquifer currently utilized by Waukesha as the source of its water supply is hydrologically connected to waters in the Lake Michigan watershed, “approving a diversion of Great Lakes water with return flow will result in

a net increase of water in the Lake Michigan watershed.” Even so, based on the Compact Council’s assessment of Waukesha’s need for water, the Final Decision limits the approved diversion amount (with return flow back to the Basin) to 8.2 million gallons per day (“mgd”), rather than to 10.1 mgd as requested by Waukesha in its Application, and restricts its distribution to a geographic area smaller than Waukesha requested.

The Final Decision also contains the finding that Waukesha had no reasonable water supply alternative available to it. *See* Final Decision ¶ 4. Waukesha operates the public water system serving residents and businesses in and around the city. Waukesha is faced with naturally occurring radium contamination in its current deep aquifer water sources and is under court order to implement a remedy by 2018. The Compact Council found that Waukesha’s deep aquifer sources are not sustainable in light of the daily withdrawals necessary to meet Waukesha’s reasonable projected public water supply needs, and use of these sources would redistribute radioactive waste into the environment. The administrative record also shows that extended use of shallow water supply wells would be unreasonable because pumping of shallow groundwater would injure surrounding wetlands and other environmentally sensitive features.

The Compact Council also concluded that the discharge of return flow to the Root River will not cause significant adverse effects. *See* Final Decision ¶ 8. Wisconsin is legally obligated to impose limits on the discharge that will protect the water quality standards for the Root River, just as it is required to protect the water quality standards for other receiving waters. Wisconsin has already proposed permit limits for phosphorus, a pollutant of concern, that are far more stringent than the limits applied to other dischargers in the Basin. Based on assessment of the potential effects of discharging to the Root River return flow that in many respects is cleaner

than the River water itself, the Compact Council concluded that no significant adverse effects will occur.

The Compact Council shares the Cities Initiative’s desire to protect the water resources of the Basin by ensuring that a diversion of waters of the Basin is allowed only in accordance with the stringent criteria in the Compact. Nevertheless, the Compact’s high barrier to diversions cannot be transformed into an absolute prohibition where the criteria specified in the Compact are satisfied. The Cities Initiative has not shown that the findings and conclusions in the Final Decision are erroneous or that the Compact Council abused its discretion in approving the diversion and Exception in this instance. Cities Initiative also did not show that the Compact Council failed to consider the Final Decision’s precedent-setting consequences. For these and other reasons discussed in this Opinion, the Compact Council determined not to open or modify the Final Decision.

II. The Compact Council Established Procedures To Govern The Hearing Process.

Section 7.3.1 of the Compact provides that any person aggrieved by any action taken by the Compact Council pursuant to the authorities contained in the Compact shall be entitled to a “hearing” before the Compact Council.¹

Because the Final Decision approved an application for a specific diversion, the Compact Council considers a hearing to review the Final Decision to be part of an adjudicatory process. Consistent with due process, the Compact Council designed its procedures to provide the Cities Initiative with the opportunity to be heard at a meaningful time in a meaningful manner, taking into account the factors articulated by the U.S. Supreme Court in *Mathews v. Eldridge*, 424 U.S.

¹ The Compact does not specify the hearing procedures that apply when Section 7.3.1 is invoked. The Compact Council developed the procedures applicable to the present hearing based on established principles of administrative law.

319, 333 (1976). Due process recognizes, however, that “not every deprivation ... requires the full arsenal of available procedural safeguards.” *Clancy v. Office of Foreign Assets Control of U.S. Dept. of Treasury*, 559 F.3d 595, 600 (7th Cir. 2009) (citation omitted).

The Administrative Procedure Act, 5 U.S.C. § 501 *et seq.* (“APA”), while not directly applicable to the Compact Council², also provided guidance. The APA requires formal hearings with trial-like procedures only where Congress expressed clear intent by specifying that the hearing be “on the record” or employing other statutory language to that effect. *See, e.g., Dominion Energy Brayton Point, LLC v. Johnson*, 443 F.3d 12 (1st Cir. 2006); *City of West Chicago, Ill. v. United States Nuclear Regulatory Com’n*, 701 F.2d 632 (7th Cir. 1983). *See also* 5 U.S.C. § 554. Absent a procedure mandated by statute, administrative agencies subject to the APA have considerable flexibility in designing hearing procedures. *See, e.g., Pension Ben. Guar. Corp. v. LTV Corp.*, 496 U.S. 633 (1990); *Vt. Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519 (1978); *Dominion Energy, supra*. *See also*, 5 U.S.C. § 558.

In the present case, the Compact does not state that a formal, trial-like hearing process is required or that the hearing must be conducted “on the record.” The Compact Council examined the Cities Initiative’s interest allegedly affected by the Final Decision, the risk of erroneous deprivation of those interests, the probable value of various procedural safeguards and the interest in avoiding a protracted, expensive process. The Compact Council recognized that almost all of the grounds that the Cities Initiative asserted for vacating or modifying the Final Decision presented either purely legal questions involving interpretation of Compact standards, or relied on scientific or technical opinions rather than the observations or credibility of lay

² The APA applies to federal agencies. *See* 5 U.S.C. § 551(1). As an agency formed by a compact among eight states and approved by Congress, the Compact Council is an interstate agency, not a federal agency.

witnesses. As such, the Compact Council determined that oral testimony and cross-examination were not necessary to ensure meaningful due process.

In addition, the Compact Council was aware and took notice of the extensive review process that had taken place before Waukesha's Application was submitted to the Compact Council by Wisconsin. This robust process over several years, which is summarized in greater detail in paragraphs 2, 3 and 4 of the Final Decision, included informational meetings, several comment periods, multiple public hearings, Tribal Consultations and review and public participation under Wisconsin's Environmental Policy Act. As the Originating Party forwarding Waukesha's application to the Compact Council for review, Wisconsin provided its own technical review to the Compact Council and pursuant to Section 4.5.1.e of the Compact, responded to multiple questions from the Compact Council members.

The Compact Council conducted its own public meetings, and solicited public comment during a duly noticed public comment period, consistent with Sections 6.1 and 6.2 of the Compact. The Tribal Governments and the public had the opportunity to submit to the Compact Council any information from the Wisconsin or Regional Body proceedings, or other sources, and many members of Tribes and the public did so. As required by the Compact, recommendations of the Regional Body were also considered. Two Regional Body members performed their own formal, technical reviews. Based on these proceedings, among other considerations, the Compact Council established the following procedural elements for the present hearing:

- a. The Cities Initiative's Request for Hearing and other significant documents throughout the hearing process were posted on a publicly available website. In addition, public notice was issued of significant steps in the hearing process and individual notice was given to the parties and interested persons;

- b. In response to the Cities Initiative’s Request for Hearing, the Compact Council requested that the Cities Initiative submit affidavits or declarations to support its right to a hearing as an “aggrieved person.”
- c. The Compact Council also established a merits briefing schedule during which the Cities Initiative submitted an opening brief and a reply brief.³
- d. The City of Waukesha was given the opportunity to intervene as a party and submitted a response brief.
- e. The Compact Council confined the factual information considered during the hearing to information in the administrative record, and based its decision entirely on the administrative record and information of which it may take judicial notice.
- f. The Cities Initiative was afforded the opportunity to introduce additional material into the administrative record and was asked to make a showing that any additional material proffered could not have been introduced during the public comment period. The Cities Initiative did not seek to add any new written material to the administrative record, but did state that the entire Wisconsin administrative record should be part of the Compact Council’s administrative record. As discussed in Section IV *infra*, the Compact Council is supplementing its administrative record with certain portions of Wisconsin’s record and other documents upon which the Compact Council directly or indirectly relied.
- g. The parties were given the opportunity to be represented throughout the hearing process by legal counsel of their choosing, and were both represented by their respective counsel.
- h. The Compact Council members participating in the hearing proceeding did not engage in *ex parte* contacts during the pendency of the hearing proceeding.
- i. The Compact Council entertained oral argument on March 20, 2017. In advance, the Secretariat discussed the oral argument process with counsel for the parties who agreed that an allocation of 45 minutes for each party’s argument, including questions by the Compact Council members and rebuttal argument by the Cities Initiative, would be appropriate. The Parties and the Compact Council accepted and followed this process.
- j. The Compact Council unanimously determined at its hearing session open to the public on April 20, 2017, that the Cities Initiative had not met its burden to open or modify the Final Decision, and subsequently issued this Opinion explaining the basis for its determination.

The Compact does not specify the standard of review applicable to the hearing. Some administrative agencies require a petitioner to satisfy a high burden to open or modify a decision. For example, when reviewing NPDES (wastewater discharge) permit decisions made by the U.S.

³ The Cities Initiative initially made a request for hearing by letter dated August 19, 2016, and filed a Written Statement in support of its request on September 16, 2016. The Cities Initiative’s brief requested by the Compact Council was titled “Supplemental Written Statement,” submitted on December 19, 2016 and incorporated the September 16, 2016 Written Statement.

Environmental Protection Agency, the Environmental Appeals Board requires petitioner to show that a finding of fact or conclusion of law is clearly erroneous or that the permit decision involves a matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a)(4)(i)(A)-(B). Courts reconsidering their own decisions frequently require a showing of manifest error of law or fact or the existence of newly discovered evidence. *See, e.g., Harsco Corp. v. Zlotnicki*, 779 F.2d 906, 909 (3d Cir. 1985).

The Compact Council concluded that as the original decisionmaker that issued the Final Decision, and as the administrative agency’s highest body, the Compact Council should have the discretion to correct any errors that the parties identify in the Final Decision regardless of whether they are “clearly” erroneous. Accordingly, the Compact Council informed the parties that the question before it is whether the Cities Initiative has met its burden of proving that the Final Decision was based on erroneous findings of fact, conclusions of law or an abuse of discretion that warrants opening or modifying the Final Decision. In this case, by vote of the Compact Council members or their alternates taken at the April 20, 2017 hearing session that was open to the public, the Compact Council unanimously decided that the Cities Initiative has not met its burden.⁴

III. The Compact Council Reached The Merits Notwithstanding Uncertainty That The Cities Initiative Is A “Person Aggrieved” By The Final Decision.

Compact § 7.3.1 provides: “[a]ny Person aggrieved by any action taken by the Compact Council pursuant to the authorities contained in this Compact shall be entitled to a hearing before the Compact Council.” As permitted by the Compact Council, the Cities Initiative submitted

⁴ In light of the unanimous decision of the Compact Council, we do not reach the question of whether unanimity is required to open and/or modify the Final Decision.

argument and supporting affidavits to show that it is a Person aggrieved by the Final Decision. Waukesha submitted countervailing arguments.

The Cities Initiative contends it is aggrieved as an organization based on its alleged reallocation of programmatic resources “to develop and execute a strategy to counteract the weakening of the Compact’s protections and to lessen the likelihood that further improper diversions will be sought and allowed.” CI Reply at 6.

Drawing on case law discussing standing in under Article III of U.S. Constitution, the Cities Initiative further argues that it has standing to sue on behalf of one of its members, the City of Racine, Wisconsin (“Racine”), due to alleged potential adverse effects of the return flow from the diversion on the Root River and Racine’s riparian recreational facilities and investments. Initially, the Cities Initiative also sought standing on behalf of its member City of Niagara Falls, New York based on the city’s reliance on “the continued integrity of the water levels in the area of Niagara Falls”; the Cities Initiative did not further pursue this position in its reply brief.

Waukesha contests that the Cities Initiative has shown that it is a Person aggrieved under the Compact, and disputes that any changes in use of programmatic resources or alleged effects from the return flow constitute a particularized, concrete injury sufficient to establish that it is aggrieved. Waukesha also notes that at times the Cities Initiative has asserted that the mayors, rather than the cities themselves, are its members. Waukesha questions the authority of the mayors participating in the Cities Initiative to act on behalf of their respective cities to challenge the Final Decision absent express approval from the cities’ governing bodies. Waukesha also disagrees that Racine will suffer any injury from the discharge of return flow to the Root River.

Nevertheless, Waukesha “strongly urges the Compact Council to address the merits of the Cities Initiative’s claims.” Waukesha Response at 7.

The Compact Council carefully considered the arguments presented in the Cities Initiative’s briefs and during oral argument, and is uncertain that the Cities Initiative has demonstrated harm to either itself as an organization or any of its members sufficient to show that it is aggrieved. Nevertheless, because the Compact Council and the public have an interest in ensuring that objections to this first diversion approval under the Compact are fully considered by the Compact Council, and Waukesha has encouraged the Compact Council to address the merits, the Compact Council will do so without fully resolving whether the Cities Initiative is a “Person aggrieved” and thereby entitled to a hearing.

IV. Limited Supplementation Of The Administrative Record Is Appropriate.

The Cities Initiative contends that the Compact Council’s administrative record is incomplete. It asserts that the Compact Council relied upon documents from Wisconsin’s public record, and that the Wisconsin record should be included in the Compact Council’s administrative record in its entirety. Supplement to Written Statement in Furtherance of Request for Hearing and Compact the Compact Council Consideration (“CI Supp.”) at 15-16. The Cities Initiative further contends that USGS modeling reports should be included in the administrative record because they were referenced by a Compact Council member in the transcript of the April 21, 2016 Regional Body meeting. *Id.* at 15 n.7.⁵ The Compact Council agrees that it is appropriate to supplement the administrative record to include all documents the Compact Council directly or indirectly relied on in rendering its decision on Waukesha’s Application. This group of documents includes the USGS reports and some, but not all, of the documents in

⁵ USGS modeling reports are also referenced in the Final Decision, *see, e.g.*, Final Decision at p. 5.

the Wisconsin administrative record developed when it was considering whether to forward Waukesha's application to the Regional Body and the Compact Council.

One purpose of creating a complete administrative record is to provide a basis for judicial review. Under the Compact, a Person aggrieved by any action taken by the Compact Council may seek judicial review in the United States District Court for the District of Columbia or the District Court in which the Compact Council maintains offices. Compact § 7.3.1. Although as noted above the APA is not directly applicable to the Compact Council, both the APA and ordinary principles of administrative law counsel that final agency actions are reviewed on the administrative record compiled by the agency rather than on evidence introduced de novo in the district court. *See, e.g., Citizens for Appropriate Rural Roads v. Foxx*, 815 F.3d 1068 (7th Cir. 2016); *USA Group Loan Services, Inc. v. Riley*, 82 F.3d 708, 715 (7th Cir. 1996). *See also, Florida Power and Light Co. v. Lorion*, 470 U.S. 729 (1985); APA § 706. The U.S. Supreme Court has stated that the administrative record should include all documents and materials that were before the agency at the time of its decision. *Citizens to Pres. Overton Park v. Volpe*, 401 U.S. 402 (1971). Courts have interpreted this principle to require the administrative agency to include in its administrative record those documents that were directly or indirectly considered by agency decision makers, including evidence contrary to the agency's position. *See, e.g., Thompson v. United States Dept. of Labor*, 885 F.2d 551, 555 (9th Cir. 1989).

The administrative record certified by the agency to the district court is afforded a presumption of regularity. To overcome this presumption and supplement the record, a party must present clear evidence. *See, e.g., Pinnacle Armor Inc. v. United States*, 923 F. Supp. 2d 1226 (E.D. Cal. 2013). Courts may allow supplementation of the administrative record (1) if needed to determine whether the agency has considered all factors, (2) when an agency has relied

upon documents or materials not in the record, (3) when necessary to explain technical terms, or (4) when plaintiff has made a showing of bad faith. *Animal Defense Council v. Hodel*, 840 F.2d 1432, 1436 (9th Cir. 1988), *amended*, 867 F.2d 1244 (1989), *cited approvingly in USA Group Loan Services, supra*. See also *California v. United States Dept. of Labor*, 2014 WL 1665290 at *3 (E.D. Cal. 2014); *Coalition to Protect Cowles Bog Area v. Salazar*, 2013 WL 595895 at *3 (N.D. Ind. 2013); *Menominee Indian Tribe of Wisconsin v. United States Dept. of Interior*, 2010 WL 4628916 (E.D. Wis. 2010).

A party seeking to supplement an administrative record on the ground that it does not include documents upon which agency decision makers relied must present “‘reasonable non-speculative grounds for its belief’ that the agency considered extra-record documents in its decision making process.” *Doe v. United States Citizenship and Immigrations Services*, 2016 WL 3640687 (N.D. Ill. 2016), *citing Great American Ins. Co.*, 2013 WL 4506929 *5, *citing Styrene Info. and Research Ctr., Inc. v. Sebelius*, 851 F. Supp. 2d 57, 63 (D.D.C. 2012). In addition, where a party contends that a document was improperly omitted from the administrative record, it is ordinarily required to identify the document with specificity, not merely by describing an entire category of documents. *California, supra*, 2014 WL 1665290 at *5, *citing City of Duluth v. Jewell*, 968 F. Supp. 2d 281 (D.D.C. 2013).

“[A]n extra-record document that is cited in the agency’s actual decision document indicates ‘consideration of the contents of the [extra-record] document’ by the decision-maker. Otherwise, a mere reference in the administrative record is insufficient [to require the document to be included in the record].” *Pinnacle Armor*, 923 F. Supp. 2d at 1241. Other courts have applied a more flexible test, noting that the more the agency substantively relied on a document

cited in its decision, the more persuasive the argument that the agency considered the document. *See, e.g., California, supra*, 2014 WL 1665290 at *10.

Consistent with these precedents, the Compact Council's existing administrative record already contains most of the documents upon which the Compact Council relied in reaching the Final Decision. In light of the Cities Initiative's request that the Compact Council's administrative record contain the entire Wisconsin record, the Compact Council evaluated whether its record should be supplemented. The documents identified in Appendix A hereto are those not already included in the administrative record upon which the Compact Council directly or indirectly relied. These documents are added to the Compact Council's administrative record. Portions of Wisconsin's administrative record and the USGS modeling reports satisfy this standard and are among the documents added. The documents from the Wisconsin record not relied upon by the Compact Council are not added.⁶

V. The Compact Council Properly Issued The Final Decision Without Allowing Additional Public Comment.

The Cities Initiative contends that the Compact Council should have allowed further public comment before issuing the Final Decision that approved a reduced water service area and a diversion rate of 8.2 mgd, a rate lower than the diversion rate of 10.1 mgd that Waukesha had requested. The Cities Initiative asserts that these changes could not have been anticipated and constitute significant modifications that may affect the reasonable alternatives available.

Waukesha disagrees, asserting that the service area and associated diversion rate approved in the

⁶ The parties' legal counsel were expressly permitted at oral argument to cite and rely on documents not yet in the Compact Council's administrative record, subject to a decision by the Compact Council on whether to add the documents. Neither counsel did so.

Final Decision were separately identified in its Application and were the subject of extensive comment by the public, including the Cities Initiative, during the open public comment period.

The Compact recognizes the importance of public participation which, as discussed in Section II above, has been lengthy and extensive. *See* Compact, §§ 6.1 and 6.2. *See also* Compact § 4.9.3(e). The circumstances under which the public comment period must be reopened are not specified in the Compact. Since the issuance of the Final Decision, neither the Cities Initiative nor any other person has sought to supplement the administrative record by presenting new information regarding reasonable alternatives (or any other issue relevant to the Final Decision).

Both the Cities Initiative and Waukesha point to the “logical outgrowth” test as supplying the applicable standard for reopening or providing an additional comment period. This test, formulated initially for use in the rulemaking context, provides that an agency “need not conduct a further round of public comment as long as its final rule is a ‘logical outgrowth’ of the rule it originally proposed.” *See, e.g., NE Md. Waste Disposal Auth. v. EPA*, 358 F.3d 936, 951-52 (D.C. Cir. 2004) (citations omitted). The key factor is whether an interested person would have known that the issue was “on the table” and would be addressed by the final rule. *See, e.g., Am. Med. Ass’n v. United States*, 887 F.2d 760, 718 (7th Cir. 1989). The “logical outgrowth” test has been applied in the permitting context. *See, e.g., NRDC v. EPA*, 279 F.3d 1180 (9th Cir. 2002) (remanding permit because it was not logical outgrowth of draft permit and public did not have notice and opportunity to comment on new provision); *In re Town of Concord*, NPDES Appeal No. 13-08 (EAB Aug. 28, 2014 at 24-25) (upholding new permit conditions developed in response to comments).

As the Cities Initiative acknowledges, the rate and volume of the diversion and discharge were at issue during the comment period---but not only in a general way. The specific area to be serviced by public water supplied from the diversion and the associated diversion volume set forth in the Final Decision as conditions of the Compact Council's approval were identified in Waukesha's Application. In addition, an amount roughly equivalent to the maximum diversion quantity approved by the Compact Council in the Final Decision, 8.2 mgd, was used in the technical analysis made available to the public during the public comment period (8.5 mgd was used by Wisconsin in its analysis and relied upon by the Compact Council in its discussions).

The Cities Initiative, other members of the public and Tribal Governments were actively engaged on the issue of the geographic area to be served by the diversion and the associated volume of the diversion to meet the public water demand. The option of limiting the diversion to 8.2 mgd was "on the table." As such, the Cities Initiative was on notice to present any reasonable alternatives to this potential diversion rate, and even to this date has not proffered any specific information beyond that presented during the comment period.

A purpose of a public comment period is to present opportunities for the administrative agency to consider public input and to issue a final decision that, where appropriate, reflects the comments made. The conditions imposed in the Final Decision were a logical outgrowth of the issues raised, comments made and technical analyses considered. The Cities Initiative and other members of the public were fairly appraised of and commented on these issues. Nothing presented by the Cities Initiative in its briefs submitted to the Compact Council identifies any additional public comments that would have been offered. Because the amount of the diversion approved by the Compact Council was "on the table" during the public comment period, no additional public comment period was warranted.

VI. The Compact Council Did Not Err In Designating The Area To Which The City Of Waukesha May Provide Water Supply Service With Lake Michigan Water.

The Cities Initiative argues that the Compact Council erred in allowing Waukesha to provide water supply service to two specific areas: land outside Waukesha's jurisdictional boundaries that was being served with municipal water by Waukesha as of May 18, 2016; and land lying within the perimeter boundary of Waukesha that is part of unincorporated land in the Town of Waukesha, referred to as "Town Islands." Final Decision ¶ II.5b.i-ii; Written Statement in Furtherance of Request for Hearing and Compact Council Consideration ("CI Statement") at 23-24 (Sept. 16, 2016). The Cities Initiative contends that including areas outside Waukesha's jurisdictional boundaries in the approved diversion area is an error of law and a violation of the Compact. CI Supp. at 19-20. It is not clear whether the Cities Initiative understands that the implication of their position would be to cut off service to approximately 250 current customers of the Waukesha Water Utility.

Although the Compact does not define "diversion area," it requires that "the Water shall be used solely for Public Water Supply Purposes of the Community within a Straddling County that is without adequate supplies of potable water." Compact § 4.9.3.a. There is no dispute that Waukesha will use Lake Michigan water solely for public water supply purposes, as required by the Compact. Likewise, it is undisputed that Waukesha itself is a "community within a straddling county," as defined in the Compact, Compact § 1.2, because the city is located wholly outside the Great Lakes Basin and wholly inside Waukesha County, Wisconsin, which straddles the Lake Michigan watershed boundary. Final Decision ¶ II.1. As such, the Cities Initiative does not contest that the Compact Council properly designated all land within the jurisdictional boundaries of the city itself as part of the water supply service area. Rather, the Cities Initiative

asserts that the Compact Council improperly included the two specific areas outside of Waukesha’s political boundaries as areas to which Waukesha may provide Lake Michigan water.

The Compact defines a “community within a straddling county” to mean any incorporated city “or the equivalent thereof” that is located outside the Basin but wholly within a County that lies partly within the Basin. Compact §1.2. Use of the term “or equivalent thereof” affords the Compact Council flexibility to consider the factual circumstances of the Application when determining the Approved Diversion Area. The Compact Council properly found that the area allowed to be served by the diversion, termed the “Approved Diversion Area,” Final Decision ¶ II.5.b, “is the equivalent of a city or town and meets the Compact definition of a Community within a Straddling County as set forth in Compact Section 1.2 for the reasons set forth in paragraph II.5.b of these Findings.” Final Decision ¶ II.5.

Extensive discussion of this issue among the Compact Council members, described in the remaining paragraphs of this Section of the Opinion, shows that the two areas at issue were included in the Approved Diversion Area based on a thorough and carefully reasoned analysis. The Compact Council restricted the Approved Diversion Area by limiting Waukesha’s ability to serve water outside the jurisdictional boundaries of the City only to areas currently served by the City and to certain unincorporated Town Islands fully surrounded by the City.⁷ This was done to avoid a “checkerboard thing of impracticality.”⁸ The Compact Council also appropriately limited the Diversion Area to locations within a Straddling County (Waukesha County), as

⁷ The diversion area applied for by Waukesha included the City of Waukesha along with parts of the City of Pewaukee, the Town of Delafield, the Town of Genesee and the Town of Waukesha. The Regional Body quickly limited the diversion area to a much smaller area than Waukesha requested. At the May 10, 2016, meeting the Regional Body considered a diversion area that was 57% of the area requested. That area included some parts of the City of Pewaukee and the Town of Waukesha that were ultimately excluded. The final Approved Diversion Area was 53% of the area requested by Waukesha.

⁸ Transcript of Special Meeting of the Regional Body at 9 (Apr. 22, 2016).

required by the definition of “Community in a Straddling County.” This limitation obviates the Cities Initiative’s concern that far-flung communities may receive Great Lakes water.

As reflected in the record, the starting point for this discussion was Waukesha’s and the Southeastern Wisconsin Regional Planning Commission’s (“SEWRPC’s”) proposed water supply service area map, which was submitted as part of Wisconsin’s Technical Review (TR). WI TR, S3, Figure 11. Other jurisdictions submitted 17 questions related to the proposed diversion area. *See* Questions from and Responses to the MI Set 1, water supply section questions 1-5; Set 2, questions 1-4; Set 3, questions 13, 16, 18 and 22; and Set 5, questions 1-3; Questions from and Responses to the NY, question 8. At the initial meeting of the Regional Body to discuss the Application, the diversion area was the first issue discussed, with comments from all jurisdictions. Transcript of Special Meeting of Regional Body (Part 1) at 15-103 (Apr. 21, 2016).

On the specific question of whether the diversion area should be limited to Waukesha’s municipal jurisdictional boundaries, Grant Trigger, Michigan Governor Snyder’s designee to the Regional Body and alternate to the Compact Council, made the following comment: “[I]t makes no sense whatsoever and would be unreasonable to limit it to the current municipal boundaries because those people who currently have service outside the municipal boundaries, you can’t just turn their water off. So that seems to be impractical.” *Id.* at 36.

At the same meeting on April 21, 2016, members of the Regional Body or their designees were aware that their interpretation of the approved diversion area could be important for potential future diversion applications. Mr. Trigger stated the following:

And the challenge we have, and to Dan's [Dan Injerd, Illinois] point about the guidance we might provide to this process when people look at it in the future is what did we do today and why?

And we can't get past this clear requirement that a community must meet—demonstrate they meet the criteria. And without that, then they shouldn't be given a diversion. They shouldn't be under consideration. So when we bump up against that, we don't have—there's no flexibility on that point. *Id.* at 45.

The Regional Body's discussion on April 21, 2016, continued on the diversion area.

Transcript of Special Meeting of Regional Body (Part 2) at 65-72 (Apr. 21, 2016). The participants recognized and discussed the existence of unincorporated areas with private water supplies that had water mains that intersected or bordered these unincorporated areas. The Regional Body representatives also aware that part of the area currently served by Waukesha was outside the City's political boundaries. On this point, Mr. Trigger said:

[These areas on the] map in blue [are] the areas currently served by the City of Waukesha [and] include areas in the city and outside of the city. It [the map] also includes some [areas that] were defined as town islands, literally small parcels that are not incorporated within the City of Waukesha boundaries but are otherwise completely surrounded by the City of Waukesha and in some cases have water supply lines either through them or adjoining them.[I]t would be impractical to conclude that those areas should not be served by this proposal. *Id.* at 66.

The discussion of the diversion area continued on April 22, 2016, with representatives on the Regional Body developing categories of areas to be considered for inclusion in the diversion area. It was noted that the Compact does not specify which areas may be included, and that there was variability in the development of municipal boundaries in Wisconsin. Transcript of Special Meeting of Regional Body at 16 (Apr. 22, 2016). Eric Ebersberger, Wisconsin Governor Walker's designee to the Regional Body, explained that there were "town islands" within the City of Waukesha boundaries, which he described as, "land lying within the city boundaries of Waukesha that is not incorporated land in the City of Waukesha but it's actually unincorporated Town of Waukesha land." *Id.* at 4.

In determining what to include in the diversion area, Mr. Trigger noted the following:

You began with, again, what was in the city, what [were the] areas currently served but outside of the city, and that led us to [a] not altogether unique but not atypical [situation] either, [where] these areas of the Town of Waukesha that are completely surrounded by the city and [there] are either water supply lines running right through [the] area or adjacent to it or [there are] agreements to serve those areas. So the -- even if it [the area] was not currently served, the most logical thing was [to serve the area], [otherwise] you create this checkerboard thing of impracticality. So, therefore, it made logical sense to include those

[areas]. . . . So you see there is this continuum. The discussion we are having is, where is the reasonable place to draw the line. *Id.* at 9-10.

The Regional Body held a webinar discussion of the Waukesha Application on May 2, 2016. At this webinar, the group reviewed a memo with a map attached (Miscellaneous Documents, 01. 4-27-16), which included various areas to consider for inclusion in the Approved Diversion Area. The memo indicates the volume of water associated with Waukesha's existing service area as of the 2013 application, 8.2 mgd, as well as volumes of water associated with other areas beyond the existing service area. Of the additional areas considered, only the Town Islands were then included, and no additional volume of water over the projected volume for the existing service area was allowed. The webinar was not transcribed, but members of the group discussed the diversion area for over two hours. Recording of Webinar, Meeting of the Regional Body at 1:16 to 3:28 (May 2, 2016).

At the meeting of the Regional Body on May 10, 2016, James Zehringer, Ohio Governor Kasich's designee who then served as Chair of the Regional Body, began the meeting by noting that the diversion area was the issue that had provoked the most discussion. Transcript of Special Meeting of Regional Body at 10 (May 10, 2016). The ensuing dialogue among Regional Body members included comments about the extensive time the Regional Body had spent on considering the appropriate diversion area and associated volume of water.

Several designees expressed their view that the final diversion area complied with the Agreement and Compact. *Id.* at 10-27. For example, Julie Ekman, the designee for Minnesota Governor Dayton, stated:

We also considered this very thoroughly, and I think the dark blue [City Boundaries and Parcels Currently Served] and the light blue [Town Islands] truly represents the communities all within the boundaries of the community of Waukesha that we can support. *Id.* at 15.

Don Zelazny, New York Governor Cuomo’s designee, said, “New York would certainly support the existing boundaries of the city service area as well as what’s indicated as the light blue boundaries [Town Islands] that are totally within that area.” *Id.* at 15.

Mr. Trigger stated:

“when you look at that continuum [considering the areas within the city’s jurisdictional boundaries plus additional areas served by the city and those town geographical islands within the city boundaries], you come back to where we are now, that’s the strongest position that we could be in relative to that continuum, and that’s why Michigan supports it.” *Id.* at 19.

The Cities Initiative did not cite any facts in the administrative record that contradict those relied upon by the Compact Council. It merely asserts that the diversion area must be restricted to the municipal boundaries of Waukesha, notwithstanding that Waukesha currently supplies water to a handful of customers outside of the municipal boundaries of Waukesha. The Cities Initiative’s position would leave those customers as well as town islands without public water – a clear hardship to persons in those town islands as well as those currently receiving water from Waukesha. Contrary to the Cities Initiative’s position, the Compact expressly affords the Compact Council the discretion to determine what is the “equivalent” of an incorporated city. The Compact Council reasonably exercised that discretion considering the specifics of the Application and defining a diversion area that is consistent with the intent of the Compact, yet reasonable from the standpoint of practical implementation. The record establishes that the Cities Initiative did not satisfy its burden to show that the Compact Council committed an error of law or abused its discretion in designating the area to which Waukesha may provide water supply service with Great Lakes water.

VII. The Compact Council Applied The Correct Legal Standard To Determine Whether Waukesha Has A “Reasonable Water Supply Alternative” To Great Lakes Water.

The Cities Initiative argues that the Compact Council adopted Wisconsin’s definition of “reasonable water supply alternative,” and by doing so committed an error of law and violated

fundamental principles of contract construction and statutory interpretation. CI Statement at 26-35. The Cities Initiative specifically points to two phrases in the Final Decision: “greater adverse environmental impacts than the proposed diversion”; and “as protective of public health as” the proposed Lake Michigan water supply. Final Decision ¶ 4-4a. Because these phrases are included in the Wisconsin definition of “reasonable water supply alternative,” the Cities Initiative concludes that the Compact Council improperly adopted Wisconsin’s definition in the Final Decision. CI Statement at 36-41.

Other than citing those two common phrases, Cities Initiative did not identify any other evidence in the record suggesting that the Compact Council adopted Wisconsin’s definition of “reasonable water supply alternative.” The Compact Council’s lengthy discussion on this topic, as detailed below, demonstrates that the Compact Council did not adopt Wisconsin’s definition, but rather independently identified and considered the factors for what constitutes a “reasonable water supply alternative” within the meaning of the Compact.

The Cities Initiative further argues that under any rational interpretation of the Compact, Great Lakes water must be allowed only as a “last resort.” Because in its view very few water supply alternatives would be “as good as” or “equivalent” to Great Lakes water, the Cities Initiative contends that the Compact Council erred in comparing various alternative sources to Great Lakes water when assessing the criterion. Great Lakes and St. Lawrence Cities Initiative’s Reply to City of Waukesha’s Response to the Cities Initiative’s Request for a Hearing (“CI Reply”) at 22-24 (Feb. 6, 2017). This argument is without merit. The Compact Council separately examined the reasonableness of each alternative to Great Lakes water and concluded that none of the alternatives was reasonable. The Compact Council also appropriately confirmed that none of the Mississippi River Basin (MRB) water supply alternatives is as protective of

public health as the proposed Lake Michigan water supply (Sub-Finding 4a.). Even with the scales weighted against a diversion of Great Lakes water (Compact § 4.8), the Compact Council correctly concluded that no reasonable MRB alternative existed.

The term “reasonable water supply alternative” is not defined in the Compact. The following criterion must be met in order for a diversion of Great Lakes water to be allowed: “There is no reasonable water supply alternative within the basin in which the community is located, including conservation of existing water supplies.” Compact § 4.9.3.d.

The Cities Initiative is incorrect that the Compact Council used Wisconsin’s definition. Although the Final Decision included the two phrases cited by the Cities Initiative that are part of Wisconsin’s definition of “reasonable water supply alternative.” The Compact Council made extensive findings regarding whether Waukesha has a “reasonable water supply alternative,” some of which do not parallel Wisconsin’s definition. The Compact Council’s primary Finding on this issue was as follows:

4. Applicant Without Reasonable Water Supply Alternative. All of the Applicant’s water supply alternatives within the Mississippi River Basin (“MRB”) are likely to have, and cannot be sustained without, greater adverse environmental impacts than the proposed diversion. The Compact Council further finds, as stated in several Findings including 4a, 4b, 7b, 8c, 8e, and 11a, that the diversion as conditioned in this Final Decision does not have significant adverse impacts in the [Great Lakes] Basin. In addition, none of the evaluated MRB alternatives were found to be reliable sources for a long-term, dependable, and sustainable public water supply and, therefore, the Applicant is without a reasonable water supply alternative.

In addition, the Compact Council made five separate sub-findings to support its conclusion that the Waukesha is without a reasonable water supply. These sub-findings detail that: 4a) the Originating Party considered a demand of 8.5 MGD average day demand in reviewing alternative water supplies. Environmental analysis of water supply alternatives using groundwater sources predicted significant adverse impacts to hundreds of acres of wetlands or significant adverse impacts to several seepage lakes; 4b) water supply alternatives that rely on

treating radium do not prevent extraction and redistribution of radium, and are not sustainable for this Applicant [Waukesha] at these volumes; 4c) groundwater flow models demonstrate a direct interconnection between the deep confined aquifer and the Basin; 4d) there is a demonstrated nexus between the Basin and the MRB that supports the consideration of adverse impacts on the MRB when analyzing the application; and 4e) the Applicant's wells induce water from the Lake Michigan watershed.

Finding 4 concluded that “none of the evaluated MRB alternatives were found to be reliable sources for a long-term, dependable, and sustainable public water supply and, therefore, the Applicant is without a reasonable water supply alternative.” Finding 4 and the information contained in the record make it clear that the Compact Council did not incorrectly adopt Wisconsin's statutory definition of “reasonable water supply alternative.”

To be sure, the Wisconsin definition includes a comparative evaluation of “adverse environmental impacts,” and some of the Compact Council Findings detail the predicted “significant adverse impacts” of the MRB alternatives.⁹ This overlap of factors does not demonstrate that the Compact Council adopted Wisconsin's definition. The reference in Wisconsin's definition to a factor in determining what constitutes a “reasonable water supply alternative” does not preclude the Compact Council from also using a similar factor, among others, if relevant to a decision under the Compact.

Even where the factors employed by the Compact Council and Wisconsin overlapped, they were at times applied differently. The Compact Council's evaluation of “reasonable water supply alternatives” included an examination of each alternative on its own merits. For example, Sub-Finding 4a identifies significant adverse impacts to wetlands and seepage lakes from the

⁹ Wisconsin's TR also discusses potential “significant adverse impacts” of the MRB alternatives.

MRB alternatives and indicates that those water supply sources are “unreliable and not sustainable without adverse environmental impacts.” This finding is not dependent on a comparison to a Great Lakes alternative.

Likewise, Sub-Finding 4b identifies the redistribution of radium into the environment as a concern regarding all the MRB alternatives. The Compact Council concluded that such alternatives are “not reasonable or sustainable for this Applicant at these volumes over the long term and present potential current and future avoidable risks to the environment and human health.” While the Wisconsin definition considers a comparative analysis (*i.e.*, a reasonable water supply alternative must be “as protective of public health” as receiving Great Lakes water), the standard applied by the Compact Council was to consider the protection of public health itself (*i.e.*, will the extraction and redistribution of radioactive waste into the environment present potential current and future avoidable risks to the environment and human health).¹⁰ Public health impacts were appropriately considered by the Compact Council in assessing whether Waukesha has a “reasonable water supply alternative” regardless of whether Wisconsin also considered this factor, albeit somewhat differently, under State law. Indeed, it would have been irresponsible for the Compact Council to ignore public health impacts.

A review of the record demonstrates that the Compact Council considered and applied the relevant factors, and that the analysis underlying its unanimous Findings was not based on Wisconsin’s standard.

Both Wisconsin’s TR, *see* WI TR S2, and Michigan’s own TR, *see* MI TR at 15-17, include discussion of whether Waukesha has a “reasonable water supply alternative.” At the

¹⁰ Indeed, the issue of extraction and redistribution of radioactive waste was not addressed in Wisconsin’s TR discussion of no “reasonable water supply alternative.” Thus, while impact on public health is included in Wisconsin’s definition, the Compact Council applied the factor differently.

Briefing on the Application by Wisconsin to the Regional Body and the Compact Council on February 17, 2016, Mr. Ebersberger noted the following with respect to the standard:

Wisconsin's Compact Implementing Statute defines reasonable water supply alternative, and as you know, the Compact does not. So we're not saying that our definition is binding on anybody else, we're saying we have a definition and now let's talk about it. We'll walk you through how we came to our conclusion. Transcript of Briefing on the Application by [Wisconsin] to the Regional Body and the Compact Council at 75 (Feb. 17, 2016).

At the Special Meeting of the Regional Body on April 21, 2016, Dan Injerd, Illinois' representative to the Regional Body, stated:

So from my standpoint as a water management manager looking at our neighbor to the north, that was an easy call for us to make to realize that the deep aquifer is not a long-term sustainable water supply when you look at it on a regional basis. . . .

The shallow aquifer is a lot more difficult in nature, so we frankly relied on the modeling work that was done by Waukesha and the State of Wisconsin looking at those impacts.

. . . So again, from our standpoint that wasn't a difficult call to make to say, yeah, it probably is not reasonable for a town the size of Waukesha to expect to be able to have a long-term sustainable supply from shallow wells without having some significant local impacts. Transcript of Special Meeting of the Regional Body (Part 1) at 120-121 (Apr. 21, 2016).

There was further discussion of the standard for "reasonable water supply alternative" at the Special Meeting of the Regional Body, on May 10, 2016, including by designees of Minnesota, Michigan, and Illinois, reflecting on important factors to consider for determining what is a "reasonable water supply alternative." Transcript of Special Meeting of Regional Body at 28-57 (May 10, 2016). Accordingly, the record is clear that the Compact Council did not adopt Wisconsin's definition.

The Compact Council likewise did not err in comparing alternatives, including use of Lake Michigan water. Significantly, before undertaking a comparison, the Compact Council found each alternative in the MRB to be unreasonable and unsustainable on its own merits. But it recognized that Waukesha has the obligation to provide its citizens with a safe and reliable public water supply. If no reasonable water supply alternative exists in the MRB, it is still

important to evaluate the Basin alternative and determine its potential effects. *See Compact § 4.9.3.e.*

Common water supply planning practice is to identify and utilize the highest quality source of water available, and add treatment as needed. Jim Tierney, New York Governor Cuomo's alternate to the Compact Council, made this point at the Oral Argument on March 20, 2017: "So one thing that's part and parcel of the theory of public health and water supply is to have multiple barriers of protection, find the best quality source water, treat it effectively, and monitoring." The Compact Council Oral Arguments, Report of Proceedings, March 20, 2017, p. 26. Consistent with common practice, determining whether there is a reasonable water supply alternative may also take into account additional factors such as ecological and other harms arising from use of the source or construction of infrastructure, interference with other uses of the source and other factors. Conducting this technically-based analysis is relevant here, just as it is whenever the selection of a water supply source is at issue. But under the Compact, this evaluation is not the entirety of the analysis.

If upon review, Great Lakes water appears to be the highest quality source, the Compact's goals and stringent criteria for allowing diversions may still preclude its use. However, contrary to the Cities Initiative's assertion, "reasonable" does not mean Great Lakes water may be used only as a "last resort." As Waukesha pointed out, the plain language of the Compact requires that before approving a diversion, the Compact Council must determine that there is "*no reasonable* water supply alternative," not "*no* water supply alternative." Waukesha Response, p. 35. In this case, where using MRB sources would be unsustainable or cause significant adverse environmental impacts, it was appropriate for the Compact Council to conclude there was no "reasonable" alternative water supply and to examine the potential effects

on the Great Lakes and surrounding ecology of allowing a diversion of Great Lakes water. Under the conditions imposed by the Compact Council in the Final Decision, the Exception and diversion as conditioned satisfy the terms of the Compact.

In sum, because the Compact does not define “reasonable water supply alternative,” the Compact Council has discretion to consider appropriate factors in determining whether Waukesha has a reasonable alternative to Great Lakes water. The Cities Initiative did not show that the Compact Council applied an incorrect legal standard to resolve this issue. Contrary to Cities Initiative’s allegation, the Compact Council did not adopt Wisconsin’s definition of “reasonable water supply alternative.” Instead, it identified those factors relevant under the Compact, only some of which were similar to those used by Wisconsin, and applied them consistent with the Compact’s purposes. The Compact Council thoughtfully considered and applied those factors independently and evaluated factors beyond those in Wisconsin’s definition. After determining that no reasonable water supply alternative existed in the MRB, the Compact Council further determined that use of Great Lakes water would be more protective of public health. Accordingly, the Compact Council applied the correct legal standard when it determined that Waukesha has “no reasonable water supply alternative” within the MRB.

VIII. The Compact Council Correctly Concluded, As A Matter Of Fact And Based On The Record, That Waukesha Does Not Have A “Reasonable Water Supply Alternative” To Great Lakes Water.

In addition to challenging the legal standard employed by the Compact Council for evaluating whether Waukesha has a reasonable water supply alternative, *see* Section VII above, the Cities Initiative also contests the factual basis for the Compact Council’s finding. The Cities Initiative contends that the Compact Council’s determination that existing groundwater sources within the MRB are not a reasonable water supply alternative is contrary to facts presented in the record, including analyses of groundwater alternatives presented to Wisconsin prior to the

Application being forwarded to the Regional Body. CI Statement at 41-43. The Cities Initiative also argues that: i.) Waukesha’s demand projections are too high; ii.) the water levels in the deep aquifer used by Waukesha have rebounded in recent years and are currently at a sustainable level; iii.) a groundwater water supply is reasonable because the water could be treated for radium contamination; iv.) the environmental impacts to surface water resources from a shallow groundwater alternative are overstated; v.) the Compact Council erroneously considered the hydrologic interconnection between the Basin and MRB as the basis for determining that Waukesha has no reasonable water supply alternative; and vi.) the Compact Council erroneously rejected a “split system” alternative. CI Statement at 41-49.

The Compact Council engaged in extensive discussion on the question of whether Waukesha has a reasonable water supply alternative in the MRB. After the Application was forwarded to the Regional Body by the Originating Party, members of the Regional Body submitted numerous written questions asking for further detail and clarification on water supply alternatives and on Waukesha’s demand estimates. A total of 24 questions were posed to Wisconsin related to reasonable water supply alternative analysis. Jurisdiction Questions: MI Set 1, water supply section questions 9 & 14, conservation section questions 2 & 7; MI Set 2, questions 9 & 10; MI Set 3, questions 1, 6, 7, 8 & 11; MI Set 4, questions 3 & 4; MN Alternatives Analysis questions 1-3; NY question 5; OH questions 1 – 5 & 8; and QC questions 2. In addition, representatives of the jurisdictions asked oral questions related to the “no reasonable water supply alternative” criterion at various meetings of the Regional Body and the Compact Council.

A water supply alternative proposed by the Compact Implementation Coalition (CIC), based on work by GZA GeoEnvironmental, Inc. (GZA) and others, was submitted to Wisconsin

during the July 2015 public comment period, and resubmitted to the Compact Council in March 2016. Wisconsin's TR and Preliminary Final EIS (EIS) were both revised to address the proposed alternative, before being submitted to the Regional Body and the Compact Council in January 2016. This proposed alternative was referenced widely in public comments by private citizens and environmental groups as a "reasonable alternative" to Waukesha's proposed diversion.

When Wisconsin publicly briefed the Regional Body and the Compact Council on February 17, 2016, and during its presentation at the public hearing on February 18, 2016, Wisconsin provided an overview of the proposed GZA alternative. Wisconsin's TR concludes that the GZA alternative was not reasonable, essentially because the water system utilized by this alternative would not have sufficient capacity to provide even for a projected average daily demand of 6.7 mgd (well below the average daily demand of 8.2 mgd approved by the Compact Council). The Compact Council was well aware of the GZA alternative that the Cities Initiative promotes in its briefs, had ample time to consider if the alternative was a "reasonable water supply alternative" during review by the Regional Body and the Compact Council, and concluded it was not a reasonable alternative.

A. Water Supply Demand.

Wisconsin's TR evaluated whether Waukesha's water demand estimate was reasonable. Although Waukesha requested a diversion of 10.1 mgd, its Application also separately identified the estimated demand for water use only within Waukesha's jurisdictional boundaries. The amount approved by the Compact Council, 8.2 mgd, was the projected demand within Waukesha's jurisdictional boundaries at full build out, Exhibit 6-5 of Application, Volume 2, although the geographic area that the Final Decision allowed Waukesha to serve included some additional carefully circumscribed areas.

The record shows that the Compact Council carefully considered the water demand estimate set forth in the Application, and made appropriate adjustments to it. Six questions relating to the demand estimate were submitted to Wisconsin from other members of the Regional Body. *See* Jurisdiction Questions: MI Set 1, water supply section questions 6, 10 & 11; MI Set 3, question 15; IL question 4; and NY question 1. At a February 17, 2016, Briefing, WDNR staff summarized Wisconsin's review of the water demand estimate, as shown in WI TR S4. Transcript of Briefing on the Application to the Regional Body and the Compact Council, at 11-13 (Feb. 17, 2016). At that briefing, Mr. Trigger noted the following about the process for developing the water demand estimate:

So when you're trying to come up with an engineering design and a financial plan based against prognostication, there could be some dilemmas associated with that. So it really boils down in the end to a certain level of professional judgment in the end as to what's the right way to approach the investment. *Id.* at 118-119.

The Compact Council did not err in approving a diversion amount of 8.2 mgd. As the record indicates, the Compact Council reviewed Wisconsin's analysis of Waukesha's water demand estimates, WI TR S4, and, considering customary standards of professional practice in water service planning, appropriately lowered the projected demand amount when it reduced the area to be served by the diversion.

B. Deep Aquifer Sustainability.

The record contains extensive information about the status of the deep sandstone aquifer, including the long term drawdown of the deep aquifer, the recent recovery of water levels and the continued depression of the aquifer at 350 feet below pre-settlement conditions. The Cities Initiative's arguments regarding the alternative of continued reliance on the deep aquifer were considered by Wisconsin, the Regional Body and the Compact Council during public comment periods. The Compact Council also reviewed information on the deep aquifer from the

Southeastern Wisconsin Regional Planning Commission (SEWRPC) regional water supply plan, groundwater modeling from the United States Geological Survey (USGS) and Wisconsin Geological and Natural History Survey, and the Illinois Water Survey. The Compact Council appropriately determined that Waukesha's continued use of the deep aquifer was not sustainable.

The Compact Council began its review of this issue with the following information from Wisconsin's TR:

Recent USGS groundwater level monitoring network data from a monitoring well in the City of Waukesha also show that water levels in the deep aquifer have recovered by approximately 100 feet from a low in 1997. These data also show that water levels are still approximately 350 feet below pre-development water levels and 200 feet below the groundwater management area threshold of 150 feet of drawdown (Figure 6). The department's review of the available information concludes that water levels in the deep aquifer are recovering to water levels similar to those in the early 1980s....Further, the department concludes that groundwater drawdown of approximately 350 feet below pre-development groundwater water levels in the deep aquifer represents a significant drawdown in the deep aquifer and limits the availability of potable water supply from the deep aquifer. WI TR at pp. 17, 19.

During the process of reviewing the Application, Quebec asked whether Waukesha could do more to reduce its use of the deep aquifer and thereby improve the aquifer's sustainability.

Wisconsin's response was as follows:

The department agrees that overuse of the confined deep sandstone aquifer is the original source of the water quality problems experienced by the Applicant. However, this aquifer is a regional aquifer system that has a cone of depression centered in the Chicago area that covers southeastern Wisconsin and northern Illinois and has been an ongoing issue for decades. The Applicant is not in control of the overall use of the aquifer, nor is the State of Wisconsin. The Applicant is only responsible for a small portion of the use of this aquifer and has a water quality issue that must be resolved by 2018 based on a court order. The City of Waukesha has implemented a water conservation plan in compliance with Wisconsin's Water Conservation and Efficiency Rule (NR 852, Wis. Adm. Code). The projected water savings from this plan reduce the need for part of the diversion; however it does not eliminate all of the need for a diversion as described in Technical Review section C1. Water conservation by the Applicant is important, but it will not resolve the problem of the overuse of the confined deep sandstone aquifer. Response to QC question 6.

Designees of the Governors and Premiers on the Regional Body discussed the sustainability of the deep sandstone aquifer at a meeting on April 22, 2016. A dialogue among Michigan, Wisconsin, Illinois and Minnesota designees focused on the nature of the "regional use and overuse of that aquifer." Transcript of Special Meeting of the Regional Body at 73-78 (Apr. 22, 2016). The Regional Body's finding related to the sustainability of the deep aquifer

was the subject of about twenty minutes of additional discussion at the webinar meeting on May 2, 2016. Recording of Webinar: Meeting of the Regional Body at 55:00 – 1:15:45 (May 2, 2016).

The Compact Council appropriately considered all the information before it regarding the drawdown of the deep sandstone aquifer in southeastern Wisconsin and northern Illinois, including the recent recovery of water levels and the continued depression of the aquifer at 350 feet below pre-settlement conditions. Based on the technical evidence in the record, the Compact Council properly determined that Waukesha’s continued use of the deep aquifer is not sustainable.

C. Radium Contamination.

The Compact Council appropriately concluded that adding treatment to address radium contamination in Waukesha’s deep aquifer wells would not provide Waukesha with a “reasonable water supply alternative.” The Cities Initiative did not identify any substantive evidence in the record to counter the Compact Council’s finding that the extraction and redistribution of radium into the environment is not a reasonable or sustainable alternative for Waukesha. Final Decision ¶ II.4.b.

During consideration of the Application, Michigan submitted a question regarding the impacts of Waukesha continuing or increasing its withdrawal and treatment of radium contaminated groundwater from the deep aquifer. Wisconsin’s response to the question included the following:

The Waukesha Water Utility evaluated technologies for drinking water radium removal in a 2003 report (Radium Treatment Study, CH2MHill). In general, most technologies can remove over 90% of the radium and that radium is present in a waste product. Waukesha currently discharges about 100 billion picocuries of radium radiation to the environment each year. Radium-226 radioactively decays very slowly with a half-life of 1,600 years. Some radium treatment technologies (*e.g.*, Hydrous Manganese Oxide – or ‘HMO’, lime softening) produce a solid waste product that would be conveyed to the wastewater plant. With these technologies, most of the radium would end up in the wastewater sludge, but some would also be

discharged in the wastewater liquid effluent that would flow into the Fox River. Other technologies (*e.g.*, ion exchange, reverse osmosis, electrodialysis reversal) produce a liquid waste product that would be conveyed to the wastewater plant; and with these technologies, a higher percentage of radium is expected to be in the wastewater liquid effluent that would flow into the Fox River. A few technologies selectively remove radium on a proprietary media (*e.g.*, Dow radium selective complex resin, Water Remediation Technology WRT Z-88). In these processes, the radium is concentrated on the media. When the media has reached its limit for radium removal or radiation levels are high, it is then transported to a low level radioactive waste landfill for disposal. Response to MI Set 3 question 1.

The Compact Council also noted that Waukesha is under a court order to achieve complete compliance with all federal and state drinking water radionuclide standards by June 30, 2018. Final Decision ¶ II.10a.i.

Waukesha currently discharges about 100 billion picocuries of radium radiation to the environment each year, and Radium-226 radioactively decays very slowly with a half-life of 1,600 years. As such, it was not an error for the Compact Council to conclude that the extraction and redistribution of radium into the environment is not a reasonable (or sustainable) alternative for Waukesha.

D. Environmental Impacts To Surface Water Resources From A Groundwater Alternative.

The Cities Initiative argues that the predicted environmental impacts from the groundwater modeling of the shallow aquifer are overstated. A similar assertion was made in comments Wisconsin DNR received in 2013 from two professors at the University of Wisconsin – Milwaukee (“UW-Milwaukee”), Dr. Cherkauer and Dr. Grundl. They cited concerns that the groundwater flow model used by Waukesha to evaluate impacts to the shallow aquifer overestimated the impacts. Wisconsin addressed these comments in the Wisconsin TR prior to forwarding the Application to the Regional Body and the Compact Council.

At the suggestion of the UW-Milwaukee professors, in its technical review, Wisconsin used the 2012 USGS groundwater flow model of the Upper Fox River Watershed, with additional groundwater modeling scenarios to minimize impacts to sensitive resources, *see* WI

TR Appendix B. Because of the extensive, sensitive surface water resources in the area of the shallow aquifer south of the City of Waukesha, it is not possible to site wells with the needed capacities without significant adverse impacts to surface water resources. Based on the record and these modeled impacts, the Compact Council found that the evaluated shallow aquifer sources within the MRB are unreliable and not sustainable without significant adverse environmental impacts. Final Decision ¶ II.4a.

E. Hydrological Interconnection.

Finding 4 of the Compact Council’s Final Decision discusses the hydrological interconnection of the Lake Michigan Basin and the MRB as support for the conclusion that Waukesha is without a reasonable water supply alternative. The Compact Council first assessed the options of using deep or shallow groundwater wells in the MRB, and found those water supply alternatives to be unreasonable. Final Decision ¶ II.4a-4b. It then assessed the additional harms resulting from the USGS and Wisconsin Geological and National History Survey estimates that about 30% of the replenishment of the water withdrawn by Waukesha’s deep wells originates from the Lake Michigan Watershed (Sub-Findings 4c, 4d and 4e and Finding 11).

Consideration of the hydrological interconnection of the basins is authorized by Compact § 4.9.3: “A Proposal must satisfy all of the conditions listed above. Further substantive consideration will also be given to whether or not the Proposal can provide sufficient scientifically based evidence that the existing water supply is derived from groundwater that is hydrologically interconnected to Waters of the Basin.” In addition, Compact § 1.3.2.a declares that the purposes of the Compact include “[t]o act together to protect, conserve, restore, improve and effectively manage the Waters and Water Dependent Natural Resources of the Basin...” The Compact Council seeks to uphold this purpose by eliminating the movement of water away from the Basin, without return, caused by Waukesha’s current practice of deep aquifer pumping.

The Compact Council found each MRB alternative to be unreasonable independent of the hydrological connection between the Lake Michigan Basin and the MRB. It also found that there was sufficient scientifically-based evidence that Waukesha's existing water supply is derived from groundwater that is hydrologically interconnected to Basin Waters. Compact § 4.9.3. While the independent assessment of the deep aquifer and shallow groundwater sources ruled out those water supply alternatives, the existence of the hydrological connection reinforced that determination.

F. Split System Alternative.

The Cities Initiative contends that the Compact Council did not adequately consider a split system, i.e. a system using more than one water source, as allegedly required by Compact § 4.9.4.a. Although as discussed *infra* at Section IX, consideration of a “split system” is not required under Compact § 4.9.4.a, such an alternative was nevertheless analyzed by the Compact Council when examining “reasonable water supply alternatives” under Compact § 4.9.3.d. Wisconsin's TR includes a “split system” alternative, the Lake Michigan and shallow aquifer alternative (alternative 5). The shallow aquifer alternatives were found to have potential for significant adverse impacts to hundreds of acres of wetlands. WI TR, Section S2. As previously discussed, the Cities Initiative argues that the predicted environmental impacts to the shallow aquifer are overstated. *See* Section VIII (D) above discussing environmental impacts to surface water resources from a groundwater alternative. The Compact Council, however, concluded based on technical analysis that the shallow aquifer sources were not a “reasonable water supply alternative,” even when paired with a partial diversion, due to the expected significant adverse environmental impacts.

Factors arguing against a “split system” alternative utilizing deep aquifer wells included the ongoing dispersion of radium radiation to the environment, *see* Final Decision ¶ II.4b,

continued inducement of water away from the Lake Michigan watershed, *see* Final Decision ¶ II.4e, and continued depletion of the deep confined sandstone aquifer, *see* Final Decision ¶ II.3c.¹¹ In addition, Waukesha considered a “split system” option in Volume 5 of its Application, but cited operational and maintenance complexities, costs and implementability as the rationale for eliminating it as a reasonable water supply alternative. Application Vol. 5, 2.2.2.6.

In sum, the record demonstrates that the Cities Initiative did not meet its burden to show that the Compact Council erred in concluding Waukesha does not have a reasonable water supply alternative within the MRB. To the contrary, as a result of the Compact Council’s extensive analysis of this issue, there is ample evidence in the record to support its determination that Waukesha does not have a reasonable water supply alternative in the MRB.

IX. The Compact Council Properly Evaluated If The Need For All Or “Part Of” The Proposed Diversion Could Be Reasonably Avoided.

Citing Compact § 4.9.4.a, the Cities Initiative argues that the Compact Council did not properly evaluate whether “part of” the diversion could be avoided through continued use of Waukesha’s existing groundwater supplies, combined with a reduced amount of Great Lakes water. CI Statement at 50. The Cities Initiative’s interpretation of this Compact provision is not persuasive. Pursuant to Section 4.9.4.a, an Exception to the prohibition against a diversion may be granted only when the need for “all or part of the proposed Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies.” “Exception” is defined in the Compact to mean “a transfer of Water that is excepted under Section 4.9 from the

¹¹ Compact § 4.9.3.b requires that any diversion must maximize the portion of water returned to the source watershed as Basin water and minimize the surface water or groundwater from outside the Basin. It is uncertain whether a “split system,” as recommended by the Cities Initiative, could reasonably be designed to meet this criterion.

prohibition against Diversions in Section 4.8.” Compact § 1.2. Accordingly, Section 4.9.4.a requires implementation of efficiency and conservation measures reducing the amount of diversion.

An applicant for a diversion may satisfy § 4.9.4.a by showing that the need for water to be transferred cannot be avoided by efficiently using and conserving its existing water supplies to meet its water demands. A discussion between Kelly Heffner, Pennsylvania’s alternate representative, and Peter Johnson, a member of the Compact Council Secretariat staff, at the Meeting of the Regional Body on April 22, 2016, presented one reasonable interpretation of § 4.9.4.a:

MS. HEFFNER: Because isn't the Compact question or criteria [§4.9.4.a] actually, can you implement a conservation program that would obviate the need for an exception request?

MR. JOHNSON: That is correct. Transcript of Special Meeting of the Regional Body at 113 (Apr. 22, 2016).

The Compact Council Sub-Finding 6a recognizes that Waukesha’s demand was reduced due to its water conservation and efficiency program, thereby eliminating the need for “part of” the diversion. Final Decision ¶ II.6a. The Compact Council properly determined that part of the proposed “Exception” (*i.e.*, the transfer of approximately 0.8 mgd of Great Lakes water) could be avoided through the efficient use and conservation of Waukesha’s existing water supplies. However, the Compact Council also properly found that the remainder (*i.e.*, the transfer of approximately 8.2 mgd of Great Lakes water) could not reasonably be avoided through the efficient use and conservation of Waukesha’s existing water supplies. “Water conservation and efficiency” is used throughout the Compact as a combined term, and Waukesha’s efficiency program satisfies this obligation.

The Compact Council’s consideration of Compact § 4.9.4.a included evaluating Wisconsin’s TR, which determined that Waukesha’s water conservation program met

Wisconsin's state law. As part of Wisconsin's process, the water conservation savings were then subtracted from the projected water demand. WI TR at 9-10. The Compact Council conducted its own review considering the relevant Compact criteria. The Compact Council made the following Finding regarding this issue:

6. Proposed Diversion Cannot Be Avoided Through Water Conservation and Efficiency. The proposed Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies and the Exception will be implemented to incorporate environmentally sound and economically feasible water conservation measures to minimize water withdrawals. (Compact § 4.9.4.a and 4.9.4.e).

6a. . . . The Approved Diversion Amount found to be consistent with the Agreement and Compact in Section II.5 (8.2 MGD) assumes a ten percent demand reduction due to conservation and efficiency measures. . . .

Accordingly, Waukesha's conservation and efficiency program satisfied Compact § 4.9.4.a.¹²

X. The Compact Council Properly Determined That The Return Flow Of Water To Lake Michigan Through The Root River Would Not Have Significant Adverse Impacts.

The Cities Initiative argues that there is substantial evidence in the record regarding adverse impacts that will result from the return flow, i.e. the discharge of effluent from Waukesha's wastewater treatment plant (WWTP) to the Root River, which flows to Lake Michigan. The Cities Initiative contends that although Waukesha will be required to meet state and federal water quality standards, the effluent will contribute to additional phosphorus loading and higher concentrations of chloride, total suspended solids, and unregulated pharmaceuticals and residual pathogens in the Root River. The Cities Initiative also objects to the Compact

¹² The Cities Initiative incorrectly interprets Compact § 4.9.4.a as requiring consideration of a "split system" drawing some water from the MRB and other water from the Basin. While not required by §4.9.4.a, consideration of a "split system" may be appropriate when analyzing "reasonable water supply alternatives" under Compact § 4.9.3.d. The Cities Initiative did not raise the "split system" water supply alternative and its interpretation of Compact § 4.9.4.a in their comments submitted to the Regional Body or the Compact Council, nor during any of the three public comment periods Wisconsin held between 2011 and 2015. The 2011 public comment period specifically requested comments on interpretation and review of the Compact criteria. Thus, the Cities Initiative waived this objection to the Final Decision by not raising it during the public comment periods. See Section V above. We nonetheless addressed this issue for completeness.

Council’s finding that the proposed return flow via the Root River would provide a “net environmental benefit” to the river. CI Statement at 51-54.

Wisconsin’s EIS discusses potential “adverse impacts” to the Root River from Waukesha’s wastewater discharge. The purpose of Wisconsin’s EIS was to disclose and discuss any potential effects of the proposed diversion on the human environment and affected natural resources.¹³ Wisconsin’s EIS concludes that any potential adverse effects on the Root River from the Applicant’s wastewater discharge would not rise to the level of *significant* adverse impacts, which is the Compact standard. Moreover, Cities Initiative did not demonstrate that the alleged impacts to the Root River are any more adverse than those resulting from any other authorized discharge in the region. In fact, the record supports the conclusion that the levels of phosphorus in Waukesha’s return flow will be lower (better) than existing water quality of the Root River.

Finding 8 of the Final Decision states that the “Diversion will be implemented to ensure that it will result in no significant individual or cumulative adverse impacts to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin.” Final Decision ¶ II.8. This Finding cites to Compact § 4.9.4.d. and focuses on whether there would be a significant adverse impact to the Basin as a whole, and not whether there is localized impact. Therefore, the Compact Council properly considered the overall integrity of the Basin in making this determination. *See, e.g.*, Transcript of Special Meeting of the Regional Body at 6-9 (Apr. 21, 2016).

¹³ Section NR 150.30(1)(b), Wis. Adm. Code, provides: “Purpose. The purpose of an EIS is to inform decision-makers and the public of the anticipated effects on the quality of the human environment of a proposed action or project and alternatives to the proposed action or project. The EIS is an informational tool that does not compel a particular decision by the agency or prevent the agency from concluding that other values outweigh the environmental consequences of a proposed action or project.”

Although it is not required by this Compact provision to consider localized impacts, the Compact Council did so. The Cities Initiative acknowledges that Waukesha's return flow will be required to meet federal and state water quality standards, but asserts that the return flow may nonetheless result in adverse impacts to the Root River. CI Reply at 30. However, the Cities Initiative does not detail how the potential adverse impacts of the return flow, which must be in compliance with federal and state water quality standards, would result in "significant" impacts to the Basin, which is the standard established in Compact § 4.9.4.d.

As a supplemental Finding, the Compact Council determined that the return flow will benefit a Basin tributary, the Root River, by adding flow during times of low flow on the river. Final Decision ¶¶ II.8c and 12. Although this fact did not substitute for the Compact Council's assessment of whether any substantial adverse impacts would occur, it constituted an additional benefit from the diversion.

The record demonstrates that the Compact Council carefully evaluated whether the return flow would cause any significant individual or cumulative impacts to the quantity or quality of the Basin waters or dependent natural resources. The Compact Council examined Wisconsin's TR, in particular Section R4, and EIS, Section 4.4.2.3. Wisconsin's TR, Section R4, provides in part as follows:

The United States Environmental Protection Agency (USEPA) has delegated Clean Water Act authority to Wisconsin. Through WDNR's Wisconsin Pollutant Discharge Elimination System (WPDES) Program, Wisconsin has the authority to permit the discharge of treated wastewater by Waukesha's wastewater treatment plant into the Root River. WDNR reviewed draft Water Quality Based Effluent Limits (WQBELs) for the Applicant for a new discharge to the Root River based on current applicable water quality standards under Wisconsin Administrative Code Chapters NR 102, 103, 104, 105, 106, 207, 210 and 217.

Wisconsin's EIS, Section 4.4.2.3, also states that USEPA has delegated Clean Water Act authority to Wisconsin, which has the authority to permit the discharge of treated wastewater effluent under Wis. Stat. § 281.31. Wisconsin's EIS notes that Waukesha will be required to

apply for a WPDES permit in order to discharge treated effluent to its preferred return flow location, the Root River. EIS Section 4.4.2.3.1. The permit limits will ensure that the return flow does not cause or contribute to a violation of water quality standards for the Root River.

The Cities Initiative contends that Waukesha has invested considerable sums of money in making the Root River an attractive waterway for public recreation, that the North Beach and Racine Harbor are both key pieces of the city's economy and that the Waukesha diversion will damage those interests. CI Reply at 10. However, Cities Initiative does not provide any specific information as to how these recreational waters will be harmed.

In contrast, Wisconsin's EIS, Section 4.4.2.3.1.5 states:

The proposed return flow would be subject to fecal coliform bacteria limits under a WPDES permit¹⁴. The planned upgrades to the Applicant's WWTP UV disinfection, as well as historical operations having less than 100 CFU/100 mL during the recreational season, would meet draft WQBELs for fecal coliform bacteria to the Root River.

The majority of the pollutant load to Lake Michigan from the Root River is from nonpoint urban and agricultural sources.¹⁵ Waukesha's proposed Root River discharge location is approximately 25 miles upstream of the river outlet to Lake Michigan. WI TR at 77.

Additionally, the Root River outlet to Lake Michigan is south of Racine's North and Zoo Beaches, and longshore currents flow south in Lake Michigan in the opposite direction from the beaches. EIS Section 3.2.2. Based on its evaluation of these and other factors, the Compact Council concluded that the return flow from Waukesha will not have a significant adverse impact on recreational uses.

¹⁴ For the Root River, Wisconsin's codified standard for recreational use for fecal coliform bacteria is 200 CFU/100 mL as a geometric mean (s. NR 102.04(6), Wis. Adm. Code).

¹⁵ Kinzelman, Koski and Wright, March 2014. "Baseline Assessment of Water Quality in support of the Root River Watershed Restoration Plan" Data Analysis Report (2011-2013). p. 5-3

This analysis is supported by recent data and analysis of *E.coli* collected in the Root River watershed provided in “Baseline Assessment of Water Quality in support of the Root River Watershed Restoration Plan”¹⁶:

In most cases, elevated *E. coli* appeared to be associated with wet weather mediated non-point source pollution...the impacts of point source pollution appear to have a localized effect...*E.coli* rapidly diminished downstream from the three WWTPs, indicating they did not have a geographically large influence on the remainder of the watershed. The limited influence of these sources was likely due to ambient conditions favoring bacterial die-off.”¹⁷ (page iii)

The members of the Regional Body and the Compact Council submitted approximately 24 questions related to return flow impacts to Wisconsin DNR. *See* Jurisdiction Questions – MI Set 1, water supply section question 12, conservation section questions 1, 4, 5 & 6, permits section questions 1-3 & 6-8; MI Set 2, questions 7 & 9; MI Set 3, question 4; MN questions 1-6; NY questions 3-4; OH question 6; ON pages 3-4.

On the issue of water quality concerns, state and federal requirements for wastewater discharges are the regulatory tool to protect the biological, chemical and physical integrity of the Root River. The Code of Federal Regulations (40 C.F.R. Part 131) specifically outlines the process for developing, reviewing, revising and approving water quality standards by the States. Water quality standards define the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria that protect the designated uses. 40 C.F.R. § 131.2.

The draft water quality-based effluent limits (“WQBELs”) for the proposed discharge from Waukesha’s Wastewater Treatment Plant (“WWTP”) set concentrations at or below the

¹⁶ *Id. (passim)*.

¹⁷ While localized increase in concentrations may occur near the outfall, Waukesha must comply with disinfection requirements to meet WQBELs designed to protect recreational uses outside a small mixing zone in the River.

applicable water quality standards¹⁸ and, for some parameters, the discharge effluent will have lower (better) contaminant concentrations than the Root River background levels. WDNR Response to TR Comments at 4 (January 2016). A new discharge that complies with water quality standards will not result in *significant* adverse impacts to the Root River or Lake Michigan.

Wisconsin's phosphorus implementation rule allows for a new discharge to an impaired water under certain conditions: a) it is part of a wasteload allocation or reserve capacity of an approved TMDL; b) the discharger can demonstrate the new load will be offset through water quality trading; or c) the discharger can demonstrate an improvement to water quality. Wis. Adm. Code § NR 217.13(8).

To ensure an improvement in water quality for the Root River, Wisconsin drafted WQBELs for Waukesha's proposed discharge of phosphorus, as low as 0.039 to 0.06 mg/L, more stringent than the water quality standard for the Root River (0.075 mg/L). The median background (existing) concentration for phosphorus is approximately 0.1 mg/L in the Root River upstream of the proposed discharge location. In lieu of a TMDL, discharging at concentrations well below the water quality standard builds in a 'margin of safety' and ensures an improvement in ambient water quality concentrations for total phosphorus. Response to MN question 1.

Wisconsin has no numeric water quality criteria for Total Suspended Solids ("TSS"); consequently the narrative water quality criterion applies. In the absence of a wasteload allocation as part of an approved TMDL, Wisconsin will set draft TSS limits at the most

¹⁸ The draft WQBELs were based on applicable water quality standards. The segment of the Root River in which the new discharge is proposed is currently impaired for phosphorus and total suspended solids. See WDNR's Approved 303(d) Impaired Waters List. There is no scheduled Total Maximum Daily Load ("TMDL") for the Root River. When a TMDL is developed, Waukesha will be included in the process, and a wasteload allocation will be given to the existing discharge under an approved TMDL. See WDNR Response to MN question 1.

stringent limits (5 mg/L for summer months, 10 mg/L for winter months). Wisconsin concluded that if phosphorus treatment is optimized and installed to meet levels within the calculated draft WQBEL range, this technology should aid Waukesha in meeting draft WQBELS for TSS. Over 95% of the Applicant's wastewater TSS effluent concentrations were less than 1 mg/L from 2010-2015. WI TR at 84.

The record reflects that the Compact Council members carefully analyzed potential water quality effects of the return flow on the Basin and water dependent resources. Michigan prepared its own Technical Review of the Application. On the issue of water quality impacts from the return flow, Michigan's TR found as follows:

The Application appears designed to adequately meet Wisconsin WQS [water quality standards], protect the GLB [Great Lakes Basin] for treated return flow and adequately prevent introduction of invasive species into the GLB. MI TR at 25.

At the meeting of the Regional Body, on April 21, 2016, designees of Minnesota Governor Dayton (Julie Ekman) and New York Governor Cuomo (Don Zelazny) discussed the potential water quality impacts of the return flow. Ms. Ekman indicated that the wastewater treatment for the effluent would be at or above water quality standards:

MS. EKMAN: It's clear that the treatment is going to be up to par and meet all the standards and requirements.

MS. EKMAN: The treatment is such a high standard, it's better than others. Transcript of Special Meeting of the Regional Body (Part 1) at 170, 173 (Apr. 21, 2016).

Mr. Zelazny spoke of additional conditions New York proposed to address any uncertainty regarding the return flow meeting water quality standards:

MR. ZELAZNY: In order to try to address a lot of the uncertainty that's in the current application and in the EIS regarding potential impacts from the – or benefits from the return flow, we would like to suggest establishing a scientifically sound adaptive management plan¹⁹ to actually monitor return flow volumes, water quality and any changing conditions of the river in order to minimize potential impacts to water, independent resources, or to confirm potential benefits to the Great Lakes source watershed.

¹⁹ The "adaptive management plan" in Condition III.2.1. of the Final Decision is not the same as an "adaptive management option" specified in Wisconsin law (Wis. Adm. Code § NR 217.18).

And we think proposing or including an adaptive management plan for return flow would be a real asset, not only for this particular diversion and understanding this particular diversion, but it would be useful as we undertake future evaluations of other diversions. *Id.* at 178-79.

In addition to reaching Finding 8 and the eight sub-findings regarding “no significant individual or cumulative impacts,” the Compact Council included Conditions in the Final Decision to mitigate any potential adverse impacts from the return flow. The Cities Initiative does not adequately address these in its challenge. For example, the Compact Council included Condition I. requiring Waukesha to monitor the Root River for at least 10 years, in order to minimize potential adverse impacts to water dependent resources of the Lake Michigan Basin.

The Condition states:

For a minimum of 10 years from the beginning of return flow to the Basin, the Applicant must implement a scientifically sound plan to monitor the mainstem of the Root River to determine changes that may have resulted from return flow (such as, volumes, water temperatures, water quality and periodicity of discharge) in order to adapt future return flow to minimize potential adverse impacts or maximize potential benefits to water dependent resources of the Basin source watershed (*i.e.*, Lake Michigan). Final Decision ¶ III.2.I.

Other conditions include a comprehensive pharmaceutical and personal care products recycling program to reduce the quantity of such products entering Waukesha’s wastewater, annual reporting of compliance with all conditions in the Final Decision, including those designed to mitigate adverse impacts to the Root River, and authority for the Compact Council or any Party to conduct an inspection regarding compliance with all conditions in the Final Decision and to enforce the Final Decision. Final Decision ¶¶ III.2.G, J, L and M.

In addition, in the Final Decision, the Compact Council included the following sub-finding on water quality impacts:

8h. The return flow will meet the Originating Party’s and federal permit requirements, providing high quality effluent to the Root River. The current WWTP processes include removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and ultraviolet light disinfection. The proposed phosphorus permit limits are well below the water quality standard for the Root River and are on an order of magnitude lower than many existing discharges to the Basin.

On the issue of water quantity impacts to the Root River, in particular alleged adverse impacts during high flow events, the following responses to Michigan's questions are important:

Return flow of the maximum 10.1 MGD (15.6 cfs)²⁰ would be less than two percent of the river flow during a 2-year frequency storm event, and even a smaller fraction during a 100-year flood. All additional flow, greater than the previous year's annual average withdrawal, will be returned to the Fox River. MI Set 1 conservation section question 4.

The department recommended that the Applicant's preferred flow management scenario (returning up to 16.7 MGD) be limited to 10.1 MGD (depending on the previous year's average annual withdrawal) in an effort to balance the Compact provisions requiring a community to return "all water withdrawn...less an allowance for consumptive use" and to "maximize the portion of Great Lakes water returned" and minimize Mississippi River Basin water in the return flow. MI Set 1, water supply section question 12.

Under the diversion approval, Waukesha will have two permitted discharge outfalls.

Currently, Waukesha discharges to the Fox-Illinois River. Waukesha would add a new discharge location to the Root River, as part of the diversion. Both outfalls would be permitted under the WPDES permit. *See* WI TR Figure 15.

Waukesha will return up to the previous year's average daily withdrawal amount per day, and therefore a volume of water approximately equal to the volume of water withdrawn from Lake Michigan will be returned to the Lake Michigan Watershed. Final Decision ¶ II.7. During storm events, when flooding is a concern on the Root River, treated effluent flow would never exceed the required amount. This management plan scenario provides flow to the Fox-Illinois River to protect the integrity of both basins. WI TR at 70.

For these reasons, the Cities Initiative has not met its burden to demonstrate that the Compact Council erred in concluding that the discharge of return flow effluent from Waukesha's WWTP to the Root River will not have a significant adverse impact on the Root River. To the contrary, the record shows that as conditioned, the Diversion will be properly implemented to

²⁰ 10.1 MGD was the diversion volume requested by the Applicant in the application submitted to the Regional Body and the Compact Council. The Compact Council later changed the approved diversion volume to 8.2 MGD.

mitigate any significant individual or cumulative adverse impacts to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin. *See* Compact § 4.9.3.e and 4.9.4.d.

XI. The Compact Council Properly Considered Cumulative Impacts And The Precedent-Setting Consequences Of The Final Decision.

The Cities Initiative argues that the Compact Council did not appropriately consider the cumulative effects and precedent of its Final Decision. *See* Compact § 4.9.4.d.²¹ The Cities Initiative is particularly concerned that other communities may have problems with their water supplies similar to Waukesha's and could use the Final Decision as precedent to seek their own diversions. *See* CI Statement at 19-21; CI Reply at 32-34.

The Cities Initiative alleges that numerous other communities in Wisconsin have the same or similar radium and water supply issues as Waukesha. CI Reply at 34. However, the Cities Initiative did not provide any evidence to support its assertion that Waukesha's constellation of "unique circumstances," as articulated in Sub-Finding 10a, apply to other Wisconsin communities. The Cities Initiative failed to show that any other community, in Wisconsin or elsewhere in the Basin, shares the same unique factual circumstances as Waukesha.

Furthermore, it is undisputed that any future applicant for a diversion of Great Lakes water under the Compact would have to independently establish that its factual circumstances are sufficient to meet all Compact criteria. Sub-Finding 10a states that "the Findings in this Final Decision are unique to this Applicant and Application and do not necessarily apply to any other applicant or application."

²¹ Compact § 4.9.4.d provides: The Exception will be implemented so as to ensure that it will result in no significant individual or cumulative adverse impacts to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin with consideration given to the potential Cumulative Impacts of any precedent-setting consequences associated with the Proposal.

The Cities Initiative further alleges that because in its view Waukesha's proposed return flow will have a direct adverse impact on the Root River, this alleged impact along with the precedent-setting consequences of the approval (*i.e.*, other possible diversions in the future) will threaten significant cumulative adverse impacts to the Basin. CI Reply at 32-33.

As previously detailed, the Compact Council determined that the return flow would not have significant individual adverse impacts on the Root River. Final Decision ¶ II.8. If faced with a future application seeking approval for a diversion that will result in a discharge to the Root River, the Compact Council would examine the circumstances, including the then-existing conditions of the Root River, in determining whether that discharge would have a significant adverse effect. With respect to the Basin as a whole, because 100 percent of the water withdrawn will be returned, no potential for cumulative impact to water quantity exists.

The Compact Council engaged in significant deliberation regarding cumulative impacts and the precedent-setting impacts of the Final Decision. The Compact Council's examination of these issues began with its review of Wisconsin's TR (WI TR, Section IA1 & IA2) and EIS (Section 6). There were three questions related to cumulative impacts and precedent submitted to Wisconsin by other jurisdictions. *See* MI Set 1 conservation section, question 3; Response to Questions, Ontario TR at 2-3.

One comment submitted to WDNR asserted that the department did not consider the precedent-setting nature of the proposed diversion. Wisconsin's response was:

The Agreement/Compact bans diversions, but provides limited exceptions ... subject to strict requirements. No Compact provision allows for an area outside of a straddling county to apply for a diversion. Before the approval of any future diversion application, that applicant would be required to independently meet strict statutory criteria applicable to the diversion request. WDNR Response to Technical Review Comments, p. 1.

The Compact Council Finding 8 that “the Diversion will be implemented to ensure that it will result in no significant . . . cumulative adverse impacts to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin,” is clearly supported in the record.

At the Meeting of the Regional Body on April 21, 2016, representatives discussed the issue of precedent. The following discussion was among three representatives: Mr. Gaucher, Québec Premier Couillard’s Designee; Mr. Trigger, Michigan Governor Snyder’s designee; and, Mr. Injerd, Illinois Governor Rauner’s designee:

MR. GAUCHER: If I may, I don't think this -- each project will be judged on its own merits and will have to be --- to meet the agreement requirements.

MR. TRIGGER: So I think maybe Marcel is heading in the right direction saying, [I]et's identify those things that make this sort of a unique application and it is a precedent which gets approved. I don't think that the intent is to say that no other application will get approved unless it has these identical circumstances, but the reasons why we approve this one were based on these unique circumstances and so unless you have got these unique circumstances, don't just rely on what happened here.

MR. INJERD: I have a general comment, and the stuff that is listed here are -- yeah, that is unique. The question I have though is whether there is the intention of saying, here is how we view precedent setting impacts, such that any future applicants better say that they can meet all of these issues or they are never going to meet the test. And that to me is not what the Compact agreement says. That stands on its own.

MR. INJERD: When I looked at this, part of my thought process on talking about precedent includes process. You know, we have had an extraordinarily open and detailed public review process. From day one this process has been as thoroughly studied and analyzed as any that I have ever been involved with. So to me there we have created a wonderful precedent on process that indicates that these types of things are looked at very carefully and very seriously, and I think somewhere we should capture that. That has been front and center to ensure that we set the precedent of process that follows the guidelines in the agreement and contract. Transcript of special Meeting of the Regional Body (Part 2) at 28-31 (April 21, 2016).

On the issue of precedent, the Compact Council made a separate Finding, in addition to Finding 8:

10. Precedent-Setting Impacts. The Compact Council has reviewed the Application for precedent-setting impacts and finds that any precedent-setting consequences associated with the Application will not adversely impact the Waters and Water Dependent Natural Resources of the Basin. (Compact § 4.9.4.d). Final Decision ¶ II.10.

The Compact Council included eight separate findings to demonstrate that the facts and circumstances of the Final Decision are unique to Waukesha and the Application and do not necessarily apply to any other applicant or application. In light of the unique circumstances

applicable to Waukesha, no adverse precedent-setting impacts will result from the Final Decision.

The Cities Initiative failed to meet its burden to show that the Compact Council erred when it concluded that the following Compact criterion was met: the diversion will be implemented to ensure it will result in no significant cumulative adverse impacts to the quantity or quality of the waters and water dependent natural resources of the Basin, with consideration given to the potential cumulative impacts of any precedent-setting consequences associated with the Application.

XII. Conclusion

As a whole, the administrative record supporting the Final Decision demonstrates that the Compact Council duly considered all Compact criteria and all relevant information, including among other things, public and Tribal Government comments in support of and opposed to the diversion request. Having fully considered the briefs and oral argument of the parties in this hearing, the administrative record, and the Compact, at its public hearing session on April 20, 2017, the Compact Council determined that the Cities Initiative has not met its burden of showing that the Final Decision was based on erroneous findings of fact or conclusions of law or an abuse of discretion that warrants opening or modifying it. Through this Opinion, the Compact Council has explained that decision and hereby denies the Cities Initiative's request to open or modify the Final Decision. In addition, for the reasons stated herein, the Compact Council grants in part and denies in part the Cities Initiative's request to supplement the administrative record – the administrative record is supplemented with the documents identified on the list attached to this Opinion as Appendix "A."

As of May 4, 2017 (the date of the issuance of this opinion), all administrative remedies available to the Cities Initiative relating to the Compact Council's Final Decision dated June 21,

2016 In the Matter of the Application by the City of Waukesha, Wisconsin for a Diversion of Great Lakes Water from Lake Michigan and an Exception to Allow the Diversion (No. 2016-1), are hereby exhausted.

So ordered.

JOINED IN FULL: (8) Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin

DISSENTING: (0)

Appendix A: Documents to Supplement the Record

	Document	Reference
1. Documents Referenced in the Decision		
1	SEWRPC 2010, A Regional Water Supply Plan for Southeastern Wisconsin. Planning Report No. 52 (12/2010)	Decision
2	Court Order - State of Wisconsin v. City of Waukesha, Case No. 2009-CX-4 (Wis. Cir. Ct. Waukesha Cnty. Apr. 9, 2009)	Decision
3	SEWRPC Simulation of Regional Groundwater Flow in Southeastern Wisconsin, Report 1 and 2, Technical Report #41 (06/2005).	Decision
4	Cumulative Impact Assessment: Regional Body and Compact Council's "Cumulative Impact Assessment of Withdrawals, Consumptive Uses and Diversions: 2006-2010"	Decision
2. Documents Referenced in Response to Jurisdiction Questions		
5	Illinois State Water Survey, 2015. Changing Groundwater Levels in the Sandstone Aquifers of Northern Illinois and Southern Wisconsin: Impacts on Available Water Supply.	MI 3 - 7
6	Desktop Evaluation Radium Treatment Study, CH2MHill, 2003	MI 3 - 1, 3-11
7	Feinstein, D.T., Fienen, M.N., Kennedy, J.L., Buchwald, C.A., and Greenwood, M.M., 2012, Development and application of a groundwater/surface-water flow model using MODFLOW-NWT for the Upper Fox River Basin, southeastern Wisconsin: U.S. Geological Survey Scientific Investigations Report 2012-5108.	NY 1-4, MN 1- 8
(3)	SEWRPC 2010, A Regional Water Supply Plan for Southeastern Wisconsin. Planning Report No. 52 (12/2010)	NY 1-5
8	GZA Alternative July 2015	MI 1 -9
3. Referenced in Wisconsin Technical Review or EIS		
9	Radium in Drinking Water - PUB-DG-008 2014	WI TR S1
10	Waukesha Water Utility Future Water Supply Study, 2002	WI TR S2
11	WDNR. 1992. Wisconsin Wetland Classification Guide. Publ-WZ-WZ023.	WI TR S2
12	See Wakeley, J.S. 2002 "Developing a 'Regionalized' Version of the Corps of Engineers Wetlands Delineation Manual: Issue and Recommendations" ACOE. And ACOE. 2012 "Wetlands Regulatory Assistance Program Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region". Version 2.	WI TR S2
13	WDNR. WDNR Wetland Rapid Assessment Methodology – User Guidance Document, version 2.0 (3/2014)	WI TR S2
14	Feinstein, D.T., Hunt, R.J., and H.W. Reeves, Regional Groundwater-Flow Model of the Lake Michigan Basin in Support of Great Lakes Basin Water Availability and Use Studies, USGS Scientific Investigations Report 2010-5109 (2010).	WI TR S1
15	Diebel, M., A. Ruesch, D. Menuz, J. Stewart, and S. Westenbroek. <i>Ecological Limits of Hydrologic Alteration in Wisconsin Streams</i> . 2014	WI TR S2
16	SEWRPC Wetland Reports	
17	SEWRPC, 1997, A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeast Wisconsin. Planning Report Number 42. pp. 242, 237, and 246	WI TR S2

18	Gaeta, J.W., G.G Sass, and S.R. Carpenter. <i>Drought-driven lake level decline: effects on coarse woody habitat and fishes</i> . Can. J. Fish. Aquat. Sci. 71 : 315–325 (2014)	WI TR S2
19	City of Waukesha WWTP Phosphorus Operational Evaluation Report, Strand, 2014	WI TR R4
20	Kinzelman, Koski and Wright, March 2014. “Baseline Assessment of Water Quality in support of the Root River Watershed Restoration Plan” Data Analysis Report (2011-2013).	WI TR R5
21	A Restoration Plan for the Root River Watershed Part 1. Chapters 1-7, Planning Report 316, SEWRPC, June 2014	WI TR R4, R5
22	Cherkauer and Grundl Comments on the City of Waukesha Application-11-27-13	WI TR Appendix B
4. Referenced in Regional Body or Compact Council meetings		
24	Bradbury_Feinstein_LegisCouncil_Oct_421_final_presentation	13. 5-10-16, p. 34
25	Clarification statement - Trigger 5-10-16	13. 5-10-16, p. 31
26	Water Flow Graphics	13. 5-10-16, p. 32
27	Water Flow Graphics GW Divide	13. 5-10-16, p. 33
5. Attachments to Comments Emailed to the Regional Body and Compact Council		
28	See ROD 04. Written Public Comments, 01.Emailed Comments Received – add all email attachments to the record	