

# Wisconsin DNR Information Request Response

**PREPARED FOR:** Jim Pardee and Ben Callan/ Wisconsin Department of Natural Resources  
**COPY TO:** Waukesha Water Utility  
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**DATE:** October 22, 2018

The Wisconsin Department of Natural Resources (WDNR) is reviewing the previously submitted Great Water Alliance (Program) updated Environmental Impact Report (EIR) to address the Wisconsin Environmental Policy Act (WEPA) requirements for the Waukesha Great Lakes Water Supply Program. The following questions were submitted to the Program for additional information on September 13, 2018. This document provides immediate answers to some of the questions and identifies which questions will be answered after further investigation.

## Information Needed – Submitted Questions and Answers

1. Has the proposed location for the water supply pump station (WSPS) been determined? What about for the alternative pipeline routes?

Answered with 9/21 Submittal

2. Has the proposed location for the return flow pump station (RFPS) been determined? What about for the alternative pipeline routes?

Answered with 9/21 Submittal

3. Two connection points to the City of Waukesha distribution system are shown in Figure 2 1. The City of Waukesha water supply connection point located at the intersection of Les Paul Parkway and East Sunset Drive is the proposed connection point. This location is preferred by the Applicant based on water distribution modeling results. A connection point at the intersection of Les Paul Parkway and East Racine Avenue was also considered and was used for resource impact calculations during the Applicant's alternatives analysis and wetland and waterway impacts. Has there been a decision to go with one or the other connection point?

Answered with 9/21 Submittal

4. Are additional treatment modifications planned for the WWTP for phosphorus or chloride?

Answered with 9/21 Submittal

5. Do the data in the wetland and waterway crossing tables double-count for the co-located pipelines?

Answered with 9/21 Submittal

6. Will there be flow monitoring equipment at the discharge site?

Answered with 9/21 Submittal

7. Need development and operational costs for the proposed pipeline and for each alternative pipeline.

Answered with 9/21 Submittal

8. Have there been further refinements in the proposed and alternative pipeline routes as suggested in the supplemental EIR?

Answered with 9/21 Submittal

9. Are there updates on the City's chloride reduction strategy? What outreach has been done to let customers, businesses, know that they will not need water softening with a switch to Lake Michigan water?

The Final Chloride Report and the WPDES Permit Application submitted to the WDNR in December 2017 documents the chloride reduction program. Consistent with these documents, the following actions have been taken since these documents were submitted:

- Updates to the sewer user ordinance to document the City's authority to regulate chlorides, incorporate minimum efficiency standards for new softeners, and require that all softeners be optimized to reduce salt use. The ordinance also requires evaluation of brine reclamation and documents the Clean Water Plant's discretion to reject hauled brine waste from salt storage areas.
  - Development of a softener optimization form and an electronic version of the form. The electronic version is in the form of a mobile app which technicians can use from mobile phones, tablets, or laptops.
  - Co-development and participation as trainers in conjunction with the Water Quality Association (WQA) to provide two training sessions for water conditioning companies. The training included the reason for the chloride reduction program, goals of the softener optimization program, parameters to be optimized, and use of the aforementioned mobile app optimization form.
  - Updates on the Clean Water Plant's website regarding the softener optimization program.
  - Flyers mailed with water bills describing the softener optimization program and actions required
  - City council passed an appropriation for local water conditioning companies to perform optimizations on water softeners
  - Water softener manufacturers are training the water conditioning technicians on model specific details associated with the softener optimizations
  - The city is in the process of executing contracts with the water conditioning companies who have completed both the WQA training and the manufacturer's training.
10. Does the City have data showing that their chloride reduction ordinance has decreased chloride concentrations at the plant since 2014?

Answered with 9/21 Submittal

11. How much chloride reduction is expected by switching to Lake Michigan water.

Answered with 9/21 Submittal

12. Will any of the proposed or alternative facilities be in flood sensitive areas or flood plains?

Answered with 9/21 Submittal

13. Need energy use information for the proposed and alternative facilities

Answered with 9/21 Submittal

14. Need Affected Acreage data for the proposed and alternative routes.

See attached Tables 1 through 3 for the wetland acreage impacted by the Preferred and Alternative Routes.

15. Need planned construction schedule.

Answered with 9/21 Submittal

16. Need affected land use acreage data for agricultural land, transportation, public or conservation land, natural areas, recreational lands, scenic areas, grasslands and forest lands affected by the proposed and alternative facilities.

See attached Tables 4 for Land Use Acreage impacted by Preferred and Alternative Routes

17. Need the planned width of pipeline construction corridors for the proposed and alternative pipelines.

Answered with 9/21 Submittal

18. Need current links to the application materials on the City's website.

Answered with 9/21 Submittal

Table 1. Affected Land Use, Supply & Return Routes											
	Residential Acres Affected <sup>1</sup>	Commercial & Industrial Acres Affected <sup>1</sup>	Transportation Acres Affected <sup>1</sup>	Utilities (Power & Comm.) Affected <sup>1</sup>	Government & Institutional Acres Affected <sup>1</sup>	Recreational Areas Acres Affected <sup>1</sup>	Agricultural Lands Acres Affected <sup>2</sup>	Open Lands Acres Affected <sup>1</sup>	Woodlands Acres Affected <sup>1</sup>	Surface Water Acres Affected <sup>1</sup>	
<b>Supply Routes</b>											
Common Route RoW <sup>3</sup>	0.03	0.00	13.17	0.02	0.00	0.30	0.00	0.48	0.00	0.00	
Common Route Buffer <sup>3</sup>	5.39	0.14	17.14	0.11	0.00	4.00	3.39	3.30	0.79	0.00	
M-1 RoW	2.33	0.02	58.49	0.04	0.01	0.00	2.17	2.26	0.00	0.00	
M-1 Buffer	22.67	3.29	78.45	0.31	1.51	0.24	22.44	10.40	0.34	0.00	
M-2 RoW	1.30	0.08	58.25	0.00	2.80	0.00	0.00	0.44	0.10	0.00	
M-2 Buffer	46.77	2.37	48.99	0.43	5.96	0.77	19.77	8.16	1.01	0.00	
M-3 RoW	1.74	0.17	65.10	0.00	0.55	0.00	0.00	1.02	0.04	0.00	
M-3 Buffer	32.66	2.85	71.24	0.99	2.36	1.13	31.95	11.89	1.11	0.17	
<b>Return Routes</b>											
R-2 RoW	3.15	0.66	113.78	1.00	0.26	1.16	0.00	3.65	0.79	0.04	
R-2 Buffer	30.47	9.71	140.24	4.40	1.98	5.96	71.80	32.11	7.37	0.50	
R-2 Easements	--	--	--	--	--	--	8.96	--	--	--	
R-3 RoW	3.12	0.59	121.69	1.00	0.26	1.10	0.00	4.14	0.48	0.04	
R-3 Buffer	28.79	9.04	158.91	4.40	1.55	5.01	76.28	30.30	4.81	0.42	
R-3 Easements	--	--	--	--	--	--	5.03	--	--	--	
R-4 RoW	3.35	0.76	104.07	1.02	0.26	13.06	0.00	3.83	0.91	0.04	
R-4 Buffer	45.96	7.54	120.15	4.82	3.11	6.26	64.92	40.20	8.29	0.52	
R-4 Easements & Electrical Transmission Corridor	--	--	--	--	--	--	8.66	--	--	--	

<sup>1</sup>Affected acres determined using a 50-ft construction corridor and a 50-foot buffer beyond the construction corridor using SEWRPC 2010 Land Use Inventory for Waukesha and Milwaukee Counties, Wisconsin

<sup>2</sup>Affected acres taken from Table G-3-1 Agricultural Evaluation Summary from GWA documents 4-170 D1 and 4-170 D2 Agricultural Impact Technical Memorandum for Oak Creek and Milwaukee Routes

<sup>3</sup>Common Route only includes an approximately 2-mile segment of overlap for supply routes M-1, M-2, and M-3

Source: SEWRPC Land Use Data and 4-170 D1 and 4-170 D2 Agricultural Technical Memorandums for Oak Creek and Milwaukee Routes

Table 2. Wetlands - WWI

Alternative Name	Emergent/Wet Meadow Affected (ac)	Scrub/Shurb Affected (ac)	Forested Affected (ac)	Open Water Affected (ac)	Other Wetland Affected (ac) <sup>1</sup>	Total Wetland Affected (ac)
Supply Routes - Milwaukee						
Common Route RoW <sup>2</sup>	--	--	--	--	--	0
Common Route Buffer <sup>2</sup>	0.01	--	--	--	--	0.01
M-1 RoW	0.24	--	0.19	--	1.46	1.89
M-1 Buffer	0.8	--	0.85	--	2.41	4.06
M-2 RoW	0.08	--	0.12	--	0.04	0.24
M-2 Easement	0.07	--	--	--	--	0.07
M-2 Buffer	0.55	0.3	0.88	--	1.8	3.53
M-3 RoW	0.12	*	0.25	--	0.07	0.44
M-3 Easement	--	--	--	--	--	0
M-3 Buffer	0.49	0.25	1.29	0.13	2.24	4.4
Return Routes - Oak Creek						
Route 2 RoW	3.65	0.09	0.26	0.04	9.22	13.26
Route 2 Buffer	7.88	0.32	2.22	1.32	15.92	27.66
Route 3 RoW	3.11	0.09	0.39	0.04	9.92	13.55
Route 3 Buffer	6.42	0.33	2.66	1	14.32	24.73
Route 4 RoW	2.45	0.13	0.14	0.04	12.31	15.07
Route 4 Buffer	11.13	0.71	2.08	0.49	18.36	32.77

<sup>1</sup>Other Wetland category includes all combination categories, flats and unvegetated wet soil (F) category, and filled wetland (\$) category

<sup>2</sup>Common Route includes an approximately 2-mile segment of overlap for supply routes M-1, M-2, and M-3

\*less than 0.01

Source: 4-130 D1 Wetland and Waterway Technical Memorandum for Oak Creek Routes and 4-130 D3 Wetland and Waterway Technical Memorandum for Milwaukee Routes, Table 4

Table 3. Wetlands - Photo Interpreted

Alternative Name	Emergent/Wet Meadow Affected (ac)	Scrub/Shurb Affected (ac)	Forested Affected (ac)	Open Water Affected (ac)	Other Wetland Affected (ac) <sup>1</sup>	Total Wetland Affected (ac)
Supply Routes - Milwaukee						
Common Route RoW <sup>2</sup>	0.14	--	0.03	--	--	0.17
Common Route Buffer <sup>2</sup>	0.02	--	0.28	--	--	0.3
M-1 RoW	0.69	--	0.02	--	0.01	0.72
M-1 Buffer	1.95	--	0.33	--	--	2.28
M-2 RoW	0.99	0.13	0.04	--	--	1.16
M-2 Easement	--	--	--	--	--	0
M-2 Buffer	0.53	0.01	0.29	0.01	--	0.84
M-3 RoW	2.41	--	0.03	--	--	2.44
M-3 Easement	--	--	--	--	--	0
M-3 Buffer	1.13	0.06	0.27	0.01	--	1.47
Return Routes - Oak Creek						
Route 2 RoW	8.73	--	--	0.02	--	8.75
Route 2 Buffer	5.13	0.31	0.29	0.12	0.04	5.89
Route 3 RoW	9.57	--	--	0.02	--	9.59
Route 3 Buffer	5.02	0.28	0.35	0.12	0.05	5.82
Route 4 RoW	11.87	0.01	0.02	0.04	0.35	12.29
Route 4 Buffer	4.01	0.27	0.12	0.02	0.01	4.43

<sup>1</sup>Other Wetland category includes all combination categories, flats and unvegetated wet soil (F) category, and filled wetland (\$) category

<sup>2</sup>Common Route includes an approximately 2-mile segment of overlap for supply routes M-1, M-2, and M-3

\*less than 0.01

Memorandum for Milwaukee Routes Table 5

Table 4. Wetlands - Combined WWI & Photo Interpreted Wetlands

Alternative Name	Emergent/Wet Meadow Affected (ac)	Scrub/Shrub Affected (ac)	Forested Affected (ac)	Open Water Affected (ac)	Other Wetland Affected (ac) <sup>1</sup>	Total Wetland Affected (ac)
Supply Routes - Milwaukee						
Common Route RoW <sup>2</sup>	0.14	--	0.03	--	--	0.17
Common Route Buffer <sup>2</sup>	0.03	--	0.28	--	--	0.31
M-1 RoW	0.93	--	0.21	--	1.47	2.61
M-1 Buffer	2.75	--	1.18	--	2.41	6.34
M-2 RoW	1.07	0.13	0.16	--	0.04	1.4
M-2 Easement	0.07	--	--	--	--	0.07
M-2 Buffer	1.08	0.31	1.17	0.01	1.8	4.37
M-3 RoW	2.53	*	0.28	--	0.07	2.88
M-3 Easement	--	--	--	--	--	0
M-3 Buffer	1.62	0.31	1.56	0.14	2.24	5.87
Return Routes - Oak Creek						
Route 2 RoW	12.38	0.09	0.26	0.06	9.22	22.01
Route 2 Buffer	13.01	0.63	2.51	1.44	15.96	33.55
Route 3 RoW	12.68	0.09	0.39	0.06	9.92	23.14
Route 3 Buffer	11.44	0.61	3.01	1.12	14.37	30.55
Route 4 RoW	14.32	0.14	0.16	0.08	12.66	27.36
Route 4 Buffer	15.14	0.98	2.2	0.51	18.37	37.2

<sup>1</sup>Other Wetland category includes all combination categories, flats and unvegetated wet soil (F) category, and filled wetland (S) category

<sup>2</sup>Common Route includes an approximately 2-mile segment of overlap for supply routes M-1, M-2, and M-3

\*less than 0.01

Memorandum for Milwaukee Routes. All acreage includes both WWI Wetlands Summary by Wetland Class and Photo Interpreted Potential