August 28, 2015

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RE: Water Diversion to Waukesha

Dear Ms. Hoekstra:

The undersigned individuals and organizations are all based in the Milwaukee metropolitan region and have long been concerned with and involved in ensuring racial and environmental justice. We submit these comments regarding the Draft Environmental Impact Statement (DEIS) and Draft Technical Review on the city of Waukesha’s request for a diversion of Lake Michigan water under the Great Lakes Compact and Wisconsin’s implementation statutes. That request is predicated on the underlying assumption that Waukesha can, should and will develop as much as it wishes, and should be able to obtain a diversion of water to do so. Moreover, the diversion application seeks Lake Michigan water for a city of Waukesha water service area that has been expanded by 17 square miles to include communities outside the city of Waukesha that do not even need the water and whose development also poses serious concerns. Particularly because there is an alternative that would adequately serve existing users without the need to divert Lake Michigan water, these underlying facts and assumptions must be reevaluated.¹

Moreover, environmental review procedures require consideration of not only strictly

¹ The City of Waukesha asserts that its need for Lake Michigan water is the result of a health issue – concentrations of radium in its drinking water supply that occasionally exceed health limits. These comments demonstrate that it is not, in fact, health, but rather Waukesha’s desire for unrestrained growth and expansion that drive and underlie the water diversion request.

Moreover, high radium levels largely coincide with periods of high water usage, typically during periods of dry weather and extensive watering of lawns. While the City has instituted restrictions on daytime watering of lawns, it has not instituted programs or incentives, much less any requirements to reduce the prevalence of extensive lawns of non-native, drought sensitive grasses. Nor has it taken steps to encourage or require their replacement with deep-rooted native plants that are drought tolerant and do not require frequent, if any, watering. Waukesha also has failed to take other steps to reduce its need for the diversion by maximizing the capture, retention, and use of rainwater by its residents and businesses for lawn and garden irrigation, and minimizing the amount of rainwater lost through storm sewer discharges to the Fox River. And, as discussed below, it clearly has failed to take any steps to resolve its concerns by limiting or constraining development.
environmental issues, but also interrelated social and economic effects. This is particularly true because Waukesha officials have made clear that construction of this project is predicated on receiving federal grants. Therefore, the project must comply with Title VI of the Civil Rights Act, 42 U.S.C. § 2000d, which prohibits not only intentional discrimination, but actions that have a discriminatory effect.

The DEIS and Technical Review, however, utterly fail to address, much less resolve, the needs and concerns of communities of color. Allowing a Lake Michigan water diversion to enable continued unrestrained sprawl and job migration will have the inevitable effect of perpetuating racial and economic segregation in the region, to the clear disadvantage of persons of color, especially African-Americans. If water is provided to Waukesha in the large volumes requested, sufficient to support massive expansion and future growth, the overwhelming disconnect between new jobs being developed in the outlying suburbs and concentrations of people of color – especially African-Americans, but also Latinos - with low incomes and in need of employment in Milwaukee, the Region’s largest city, and only majority minority city, will only worsen.

Under such circumstances, any environmental review must consider the option of limiting unrestrained plans for development in the city of Waukesha and rejecting the proposed, greatly expanded, water service area, and must evaluate the extent to which doing so could actually benefit historically (and currently) disadvantaged communities in the region.


Federal laws, regulations and orders make it clear that planners must address issues of concern to communities of color, as well as low-income residents. Title VI of the Civil Rights of 1964 prohibits applicants for or recipients of federal funds from discriminating based on race, color or national origin. The regulations implementing Title VI prohibit actions that have a discriminatory effect, not just intentional discrimination. For example, under EPA’s Title VI regulations, a “recipient shall not use criteria or methods of administering its program or activity which have the effect of subjecting individuals to discrimination because of their race, color, national origin, or sex, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program or activity with respect to individuals of a particular race, color, national origin, or sex.” 40 C.F.R. § 7.35(b) (emphases added). In other words, regardless of intent, and regardless of whether some persons of color may benefit from certain decisions, actions that have a disproportionate effect on persons of a “particular” race or national origin violate federal law. Nor are these Title VI requirements limited to the EPA. All federal


3 Assuming, as has been reported, that communities seeking Lake Michigan water will seek federal assistance for infrastructure construction, Title VI would indisputably apply.

4 The language regarding a “particular” race means that the fact that some minority
agencies - from the Department of Defense, of which the Army Corps of Engineers is a part, to the Department of the Interior, Department of Transportation, and so on - are subject to Title VI, and have similar regulations prohibiting actions that have a discriminatory effect. See, e.g., 32 C.F.R. Pt. 195; 43 C.F.R. Pt. 17, Subpt. A; 49 C.F.R. Pt. 21. Thus, regardless of the identity of the federal agency from which communities may seek financial assistance, these rules and regulations apply.

In addition, federal environmental justice policies – including policies adopted by EPA - mandate consideration of a broad spectrum of potential adverse effects of agency programs and activities on minority and low-income populations, including socioeconomic effects.

Adverse effect or impact is a term used to describe the entire compendium of “significant” . . . individual or cumulative human health or environmental effects or impacts which may result from a proposed project or action. Examples of adverse effects or impacts include but are not limited to: . . .

* Air, noise, soil, and water pollution or contamination;
* Destruction or disruption of man-made or natural resources;
* Destruction or disruption of community cohesion or a community’s economic vitality;
* Destruction or disruption of the availability of public and private facilities and services; . . .
* Adverse employment effects;
* Displacement of persons, businesses, farms, or nonprofit organizations; and
* Increased traffic congestion, isolation, exclusion, or separation of individuals within a community or from a broader community.


II. History and Data Show Pervasive Segregation and Discrimination in the Region.

The “interrelated cultural, social, occupational, historical, or economic factors” at issue here – which the DEIS fails to address - include a long legacy of racial segregation and discrimination against persons of color, especially African-Americans, in the region. As an attorney for the Waukesha Water Utility wrote in a 2004 memorandum, diverting Lake Michigan water to another Waukesha County community potentially “would encourage urban sprawl and affect the overall water supply. Lake Michigan’s water supply should not be the remedy to groups, such as Asians or Latinos, may be somewhat less segregated is no defense to the exclusion and segregation of African-Americans.
problems that New Berlin’s urban sprawl plans would create.” That is no less true of a diversion to Waukesha and the communities surrounding it.

A. The Use of Water Cannot Be Separated from Regional Development Patterns.

It is critical to recognize the historical (as well as continuing) interrelationship between water and development in this region. Until 1959, the city of Milwaukee “followed the policy of not serving water outside its city boundaries with a view of discouraging flight of industry and commercial establishments to other communities who offered lower taxes.” When in 1959 a legal challenge led the city of Milwaukee to sell water to Wauwatosa, industrial development that might have occurred in Milwaukee occurred in this suburb instead.

It is after this time that much of the region’s suburban sprawl occurred - growth patterns that profoundly disadvantaged the disproportionately poor and minority residents of Milwaukee. Proposals to provide Lake Michigan water to New Berlin in the 1970s raised similar concerns. The city of Milwaukee has also long questioned the viability and desirability of extending water lines to “unplanned urban sprawl as seems to have characterized so much of the counties adjacent to Milwaukee.” In particular, the growth of dwellings on large lots, with inadequate ground water, “produced a major ecological problem which the city of Milwaukee is now being asked to remedy.”

Nor has this sprawl ended. Although the Southeastern Wisconsin Regional Planning Commission has claimed that the expanded service area would not facilitate significant new development, city of Waukesha officials and staff talk openly of growth to the west, southwest, and south, as well as of annexation of Town of Waukesha lands. For example, the city of


7 Id.

8 “An Analysis of the New Berlin Petition for City of Milwaukee Water Services,” Milwaukee Dept. of City Development (March 1974) (Ex. C)

9 Id.

10 Id.

11 The town of Waukesha lands likely to be annexed to facilitate this development are included in the expanded water service area. Water diversion advocates apparently know that seeking water for an expanded service area is a problem: the Greater Milwaukee Association of Realtors, for example, specifically told its members to advocate for the diversion, but to “refrain
Waukesha’s recently-retired community development director confirmed that “I see us continuing to grow to the west. There are 1,500 acres still in our water and sewer service area, much of which is relatively vacant. It would require annexation (from the Town of Waukesha) for sewer and water service, of course, but it’s a logical extension.”

The former city planner, now community development director, advocated for creation of an industrial district to the south, where staff expect city limits to expand. Officials also want to move the fire station farther from the city center, due to land annexations related to the expansion of the city to the southwest.

Further, there is current, significant industrial water use in Waukesha, by industries that rely on high capacity wells. DEIS, Sec. 3.14. It is also clear that Waukesha County and its businesses want water not just to sustain existing uses, but for economic development. And the city of Waukesha admitted (after the completion of the Water Supply Study) that the “small number of industries served by the City of Waukesha” used 13% of the City’s water supply, that existing industrial customers were considering increasing production, that at least one new industry was already investigating developing in Waukesha and that 8 to 10 new industrial users could reasonably be expected to develop or redevelop in the city, and that the water use of these customers could not be adequately forecast but that expansion could lead to a “material” increase from comments that relate to more water for growth or expansion of businesses or land development.”


See, e.g., Sean Ryan, “Waukesha businesses wait for water answers,” Daily Reporter (Apr. 2, 2010) (“Local business associations - including the Waukesha County Chamber of Commerce and Sustainable Water Supply Coalition - are backing the Lake Michigan plan, which offers the guaranteed, long-term water source businesses want, said Mary Baer, membership development liaison for the chamber. ‘Water is probably the oil of this century,’ she said. ‘And we believe, the Waukesha County chamber believes, that water is an economic development issue.’”)(emphasis added) (viewed 8/17/15 at http://dailyreporter.com/2010/04/02/waukesha-businesses-wait-for-water-answers/); see also “Coalition seeks to bring Lake Michigan water to Waukesha,” BizTimes Daily (Feb. 5, 2010) (“Sustainable Water Supply Coalition, an alliance of business organizations in southeastern Wisconsin, has been formed to advocate for water policy issues, including access to Lake Michigan water for the city of Waukesha”) (viewed 8/17/15 at http://www.biztimes.com/article/20100205/ENWSLETTERS02/302059997/).

Apparently this is in addition to Waukesha industries drawing water from high-capacity wells.
in its water needs. It is also clear that the Waukesha Water Utility is seeking water not just for existing needs, but to support significant “buildout.” Id. at 1. Thus, Waukesha clearly intends for industries and businesses to use diverted water for expansion, not just to serve existing needs.

“What this situation demands is a regional water policy which prevents urban sprawl, prevents industrial plant raiding by communities and which does not impoverish the central city by encour[aging] its industries and commercial establishments to leave.” That regional policy does not exist. To the contrary, decades of unrestrained sprawl, untethered from provision of regionwide affordable housing, regional transit, and non-discriminatory job access, have exacerbated the problems of communities of color, especially African-Americans, in the region.

B. There is Profound Discrimination and Segregation in the Region.

Wisconsin and Milwaukee’s black and Hispanic communities manifest deep and enduring socioeconomic effects of historic discrimination across a wide range of areas. Along a daunting array of dimensions . . . the state and its largest metropolitan center display overwhelming patterns of racial inequality, racial disparities, and racially based socioeconomic distress: most segregated metropolitan area in the nation, widest racial income gap, second highest black poverty rate, among the highest levels of concentrated poverty in neighborhoods and schools, second lowest rate of black male employment, third lowest rate of female employment, second widest racial gap in school test scores third lowest rate of minority business ownership, worst racial disparities in incarceration rates. Minority communities in Wisconsin and metro Milwaukee (where 80 percent of the state’s black population lives and 45 percent of the state’s Latino population resides) clearly bear the socioeconomic effects of racial inequities. . . .


18 Waukesha’s application confirms this. Its Water Supply Service Area Plan projects a doubling of industrial land use in the Water Supply Service Area between 2000 and 2035 (from 3% to 6%), an increase in residential land use of more than two-thirds (from 28% to 47%), and an almost total conversion of agricultural and open lands to developed uses (with open land declining from 30% of the total area in the WSSA to only 4%). See, Application, Vol II, Ex. 2-6, pp. 2-7.

19 Industrial water sales in the City of Waukesha declined by more than 50% between 1999 and 2013. Draft Technical Review, p. 60. In contrast, Waukesha’s application projects a future need for dramatically more water for industrial use, even though the higher cost of water in the future should lead to significantly greater conservation and efficiency by industrial users. The necessary implication of this is that Waukesha is planning for a huge increase in industrial activity to make use of the large volume of Lake Michigan water that it has allocated for industrial use.

20 Zeidler letter.
Levine, Dr. Marc V., “Racial Disparities, Socioeconomic Status and Racialized Politics in Milwaukee and Wisconsin: An Analysis of Senate Factors Five and Six of the Voting Rights Act” (Oct. 18, 2013) (“Levine report”) at 22 and generally 5-23 (Ex. G).

The Milwaukee metropolitan statistical area (MSA) is the most racially segregated region in the United States for African-Americans and among the most segregated for Latinos. Id.; “A Regional Housing Plan for Southeastern Wisconsin: 2035,” (“Housing Plan”), SEWRPC (March 2013) at 127 (viewed 8/17/15 at http://www.sewrpc.org/SEWRPCFiles/Publications/pr/pr-054-regional-housing-plan-2035.pdf).

At the heart of metropolitan Milwaukee’s hypersegregation is this fact: Milwaukee has the lowest rate of black suburbanization of any large metropolitan area in the country. . . The Hispanic level of suburbanization in Milwaukee, though much higher than the black rate, still lags significantly behind [even] other highly segregated metropolises. In short, to a greater extent than any large region in the country, Milwaukee’s minorities are concentrated in the urban core, in neighborhoods . . . marked by concentrated poverty, joblessness, and other measures of socioeconomic distress.

Levine report at 8-9.

While the DEIS, Sec. 3.13.3, tries to hide the extent of these problems by mentioning that the “non-white” population of the city and county of Waukesha has increased and is purportedly projected to increase, it entirely fails to disaggregate this data by race. This omission has the effect (if not the intent) of avoiding discussion of the extent of regional segregation, especially for African-Americans and to a lesser, but still significant, extent for Latinos. As of 2010, only 1.3% of Waukesha County’s entire population – about 4900 people - was African-American, while almost 52 times as many African-Americans – about 253,800 - lived in Milwaukee County. “The Population of Southeastern Wisconsin,” SEWRPC (April 2013) at 17 (viewed 8/17/15 at http://www.sewrpc.org/SEWRPCFiles/Publications/TechRep/tr-011-5th-ed-population-se-wisc.pdf). Waukesha County’s Latino population is somewhat larger but still constitutes only 4% of its total population, and almost eight times as many Latinos live in Milwaukee County as in Waukesha County. Id. at 18. Nor can these disparities be blamed on Milwaukee’s larger overall population: only about 1½ times as many non-Hispanic whites live in Milwaukee County as in Waukesha County. Id. at 19.

The city of Waukesha fares little better: as of 2010, only 1.9% of its population was African-American. Calculated from “Hispanic or Latino origin of householder by race of householder,” (2010 Census Table H7) (Ex. H). Although its Latino population is larger, the city

21 This expert report, prepared for and submitted in the 2013 federal voting rights trial of Frank v. Walker, confirms the profound segregation and racially-based inequality in the region.

22 In fact, just the increase in the Waukesha County’s non-Hispanic white population from 2000 to 2010 – more than 13,000 people – is more than 2 ½ times the total African-American population in the entire county. Id. at 17, 19 (calculated from Tables 11, 14).
remains more than 86% non-Hispanic white. *Id.* Moreover, the communities included in the 17 square mile expansion of the service area are even more profoundly segregated: the town of Genesee is 98% non-Hispanic white, the town of Delafield is 97% non-Hispanic white, the town of Waukesha is 96% non-Hispanic white, and the city of Pewaukee is 95% non-Hispanic white, and none of these outlying communities is more than 1% African American or more than 2.3% Latino. *Id.*

The following map, created by SEWRPC, starkly depicts the extent of the region’s segregation.
Housing Plan at 125. SEWRPC’s map was based on 2000 data, but the 2010 census showed no improvement. Rather, a subsequent “ranking reaffirms Milwaukee’s place as the overall most segregated metropolitan area in the United States.” Lecci & Maternowski, “New Ranking: Milwaukee still country’s most segregated area,” WUWM (Nov. 27, 2013) (viewed 8/17/15 at http://wuwm.com/post/new-ranking-milwaukee-still-countrys-most-segregated-metro-area).

C. Suburban Housing Policy Exacerbated Segregation.

Historically, federal housing policies that tended to encourage segregation were “exacerbated by real estate steering, insurance redlining and other housing business practices in metropolitan Milwaukee intended to safeguard property values by preventing racial and ethnic mixing. Together, these practices set the pattern for and reinforced neighborhood segregation. . . .”

“[T]he political climate of Milwaukee’s suburbs has also played a role in maintaining this entrenched pattern of racial segregation. The historical legacy of housing discrimination and resistance to desegregation in Milwaukee and its environs has been well established in the

23 See also, e.g., “The Racial Dot Map: One Dot Per Person for the Entire United States,” Created by Dustin Cable (July 2013) (for metropolitan Milwaukee area) (viewed 8/17/15 at http://demographics.coopercenter.org/DotMap/index.html)

24 “Embracing Diversity: Housing in Southeast Wisconsin,” Public Policy Forum (2002) at 3 (viewed 8/18/15 at http://publicpolicyforum.org/sites/default/files/housing.pdf). African-Americans and Latinos did not unilaterally choose to concentrate in the central city but were encouraged or forced to do so by numerous forces – including explicit governmental actions and public (as well as private) discrimination that has continued until recent years. See also Levine report at 10-11, 30-34; Housing Plan at Ch. VI.
literature.” Levine report at 10. “White flight” to the suburbs exacerbated – and continues to exacerbate – segregation. See, e.g., Embracing Diversity at 10 (as neighborhoods approached 30% minority residents, whites “moved out in a state approaching panic,”); “Turning Points in Wisconsin History: Desegregation and Civil Rights,” Wisconsin Historical Society (“Suburbanization also contributed to segregated housing as whites increasingly moved out of Milwaukee, leaving the inner city to African Americans - a trend that persists to this day.”) (viewed 8/17/15 at http://www.wisconsinhistory.org/turningpoints/tp-049/?action=more_essay); SEWRPC Population at 19 (Milwaukee County had a 12% decline in its non-Hispanic white population from 2000-2010 at the same time that its minority population was increasing by 21%).

“While overtly racist policies are now illegal, their legacy persists.” Embracing Diversity at 11. One way this occurs is by fierce suburban opposition to affordable housing, upon which persons of color are more likely to depend. “Efforts to increase moderate income


27 In 2011, for example, “the U.S. Department of Justice (DOJ) sued New Berlin [in Waukesha County] for violations of the federal Fair Housing Act, arguing that the suburban community killed the affordable housing project ‘because of race and because of community opposition that city officials understood to be based on the race and on racial stereotypes of the prospective tenants of affordable housing.’ The DOJ suit described the political climate in New
affordable housing and especially low-income ‘fair share’ housing in suburban communities are continually rejected by residents who contend that these types of housing will be a drain on their tax base and will lower their property values.” Embracing Diversity at 11.

There is no question that persons of color in the region – especially African-Americans and Latinos – are far more likely to depend on affordable and multifamily rental housing than whites. See, e.g., Housing Plan at 451 (“About 30 percent of households with White/Non Hispanic householders rent their homes. About 68 percent of households with African American householders and about 58 percent of households with Hispanic householders rent their homes;” “Households with minority householders are more likely to be extremely low- or very low-income households than those with non-minority householders. About 41 percent of households with minority householders are extremely/very low-income households compared to about 20 percent of households with non-minority householders.”) “Given the relatively higher unemployment rates and lower incomes of African Americans and Hispanics in the Milwaukee area, the need for more affordable housing for these populations is clear.” Id. at 356. Rather than seek to resolve this situation, Waukesha has taken steps that perpetuate segregation.

For example, in 1992, Waukesha County’s barriers to affordable housing were evaluated in detail. 28 That report made it clear that the County was pervaded with local regulatory barriers that made it difficult to site multifamily and affordable housing in its municipalities. Yet in more than two decades since that report, there has been little indication of efforts to reduce or eliminate this legacy of discrimination. Instead, continuing decisions by Waukesha County communities that may seek Lake Michigan water, including explicitly limiting the availability of multifamily housing, also perpetuate segregation. The city of Waukesha, for example, in 2009 formally reduced its target percentage of multifamily rental housing from 45% (with 20% of that

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Some of the opposition was based in part on fear that prospective tenants would be African American or minority. The Mayor, Aldermen, Plan Commissioners and staff at DCD were aware that community opposition was based in part on race. The communications they received over several weeks contained express and implied racial terms that were derogatory and based on stereotypes of African American residents. These communications reference ‘niggers,’ ‘white flight,’ ‘crime,’ ‘drugs,’ ‘gangs,’ ‘families with 10 or 15 kids,’ of ‘slums,’ of not wanting New Berlin to turn into ‘Milwaukee,’ of moving to New Berlin ‘to get away from the poor people…’” Levine report at 10-11.

being “duplex” and 25% other multifamily) to 35% multifamily (also including duplexes).  

In 2010, the city of Waukesha rejected proposals from two developers to construct affordable multifamily housing. The communities that are part of the expanded water service area fare even worse: the town of Genesee and the city of Pewaukee have no affordable tax credit housing at all, while the towns of Delafield and Waukesha have no affordable family housing – which is the critical need to reduce segregation in the region. And in 2014 the Waukesha County board rejected and amended multiple elements of SEWRPC’s Housing Plan that were intended to ensure fair and affordable housing throughout the region.

D. Suburban Transportation Decisions Have Been Discriminatory.

Transportation-related decisions and policies of suburban officials, not unrelated to housing policy, have also had the clear discriminatory effect, if not the intent, of limiting the employment opportunities of persons of color, especially those from Milwaukee. For more than


31WHEDA – Low Income Housing Tax Credit Projects Allocated or Awarded (viewed 8/18/15 at http://www.wheda.com/uploadedFiles/Website/Business_Partners/Property_Managers/Other_Reports/allocations_historic.pdf ); Housing Plan at 325.

half a century, transportation planning in metropolitan Milwaukee has emphasized freeway
construction and automobile travel. Freeway construction destroyed urban neighborhoods and
facilitated suburban sprawl – which was overlaid with, and related to, racial segregation in
housing. Residential relocations caused by freeway construction compounded the problem,\(^{33}\)
while sprawl quite literally paved the way for white flight from the city. By 1972:

> the over-emphasis on the auto and the efforts to serve the public demands for eliminating
> congestion [had] produced some serious detrimental side effects. Contrary to the former
> claims of the planners that transportation facilities only serve planned land uses, there are
> strong indications that there exists an important feedback whereby the freeway is an
> important determinant of land use. The existing spread of costly urban sprawl has been
> accelerated to a large degree by the extension of the freeway system into vast amounts of
> formerly rural lands. The central city has also belatedly come to realize that as a result of
> freeway construction, it has had to bear a number of social and economic costs such as
> removal of needed housing, increased pollution, reduced tax base, and the loss of jobs.\(^{34}\)

These effects, of course, adversely and disproportionately affected the disproportionately
minority residents consigned to living in the city.

> During the 1990s, it appeared that the transportation planning process finally had begun
to meaningfully consider the needs of communities of color. In 1997, a Locally Preferred
Alternative (LPA) was selected. It included, among other components, light rail transit in
Milwaukee County and a 21% expansion of bus service in Milwaukee and Waukesha counties
“targeted at getting workers to jobs in the two counties.”\(^{35}\) The expansion of public transit was
crucial: at the time the MIS/DEIS was issued, the central city unemployment rate was 12%,
while many jobs in Waukesha County remained unfilled.\(^{36}\)

\(^{33}\)“Various relocation studies, done primarily in relation to urban renewal projects, have
found that white households, on the average, migrate longer distances than black households of
similar economic circumstances. Presumably, this is due to residential segregation, imposed or
(Milwaukee Urban Observatory, March 1972) (Ex. L) at 14.

\(^{34}\)Freeway Task Force Report (Milwaukee Dept. of City Development, June 1972) (Ex. M) at 12.

\(^{35}\)Milwaukee East-West Corridor Transportation Study, Major Investment Study/Draft
Environmental Impact Statement, Locally Preferred Alternative (WisDOT, FHWA, FTA, May
1997) at S-1. (Apparently not available online, and thus not available to submit with these
comments.)

\(^{36}\)Major Impact Study/Draft Environmental Impact Statement (WisDOT, FHWA, FTA, Oct.
1996) at 1-17. (Apparently not available online, and thus not available to submit with these
comments.) Numerous other studies and reports confirmed this mismatch, which clearly and
disproportionately affected minority and low income residents of the central city. *See also*, Ex.
N (Sustainable Milwaukee Complaint at 27-31).
But actual implementation of the LPA never occurred. In late 1997, the WisDOT Secretary and Governor refused to allocate funding for any portion of the Preliminary Engineering/Final Environmental Impact Study dealing with light rail. Ex. N (Sustainable Milwaukee Complaint at 25-26.) And there were racial overtones to these decisions.

Increasingly . . . racialized politics in the state and region took a more coded form. An example was the policy issue of whether to build a light rail transit system in the Milwaukee region. Favored by urban leaders such as the mayors of Milwaukee in the 1990s and 2000s, and pursued, in one form or another, in almost every other large metropolitan area in the country, opposition to light rail as a “taxpayer’s nightmare” and “billion dollar boondoggle” became a mantra for politicians in Milwaukee’s overwhelmingly white, hypersegregated suburban and exurban communities . . . . As [Milwaukee’s] pro-light rail Mayor John Norquist put it: “The right-wing talk radio guys would always promote it to their listeners that somebody from the city would come out to the suburbs and steal their TV set…I think the Republicans from the suburbs around Milwaukee found light rail to be an issue that excited their base at election time, so they ended up running against it. Suburban politicians such as Brookfield’s Scott Jensen, Waukesha’s Dan Finley, and Wauwatosa’s Scott Walker all incorporated opposition to light rail into their campaigns. And George Watts, an Ozaukee County resident, downtown Milwaukee merchant, and candidate for mayor of Milwaukee in 2000, based his campaign largely on opposition to light rail; earlier he had explicitly raised the largely suburban fears that “urban criminals could use the trains to prey on suburbanites” by saying that “light rail brings strangers who are not only a threat to your property, but to your children.” Transit advocates described these references as “code words for race,” and in Milwaukee several black politicians decried Watt’s remark about “strangers” as a racial reference. 37

Levine report at 34-35 (internal footnotes omitted). Such attitudes led to filing of race discrimination complaints – which state officials agreed to settle by using their best efforts to expand transit. Ex. N. That agreement, however, has been honored primarily in the breach. Even though the regional long-range transportation plan recommended significant increases in transit service and did so, specifically, as a matter of racial equity, transit has moved backwards. 38 See also, Housing Plan at 932 (socioeconomic (environmental justice) analysis

37 “Crime” and similar references have been used in this region for decades, as coded references to persons of color, especially African-Americans. See, e.g., Levine report at 31 (in 1970s, Nazi party candidate for mayor in Milwaukee stating, inter alia, “Are you fed up with runaway crime and unsafe streets?”); id. at 30-36.

38 “The public transit recommendations of the regional transportation plan would, in particular, serve minority and low-income populations within Southeastern Wisconsin. The transit element of the regional transportation plan would in particular connect minority and low-income populations with jobs. Also, the public transit recommendations of the regional transportation plan are directed towards improving transit service in central Milwaukee County.
“found a need for regionwide cooperation on effective workforce development, access to educational opportunities, and an effective transit system to fully address the problems caused by the concentration and isolation of environmental justice populations. The analysis determined that full implementation of the public transit element of the year 2035 regional transportation system plan, as recommended by the regional housing plan, should be a priority.)” (emphases added.) Thus – despite the explicit provisions of the regional (including Waukesha) 2035 Plan that transit expansion was necessary to serve minority communities and the reiteration in the regional (including Waukesha) Housing Plan that this was a priority to reduce the concentration and isolation of these communities, transit has declined while highway capacity expansion proceeded apace.

And Waukesha actions have contributed to this decline. As noted above, its leaders have objected to transit on grounds demonstrating implicit, if not explicit, bias. In recent years, the County has also rolled back public transit, including transit to connect Milwaukee residents to the kinds of jobs the water diversion would serve. For example, in 2004 Waukesha County declined to continue contributing to a route to connect Milwaukee to jobs in New Berlin, as well as West Allis. In 2007, Waukesha County officials eliminated a transit route that connected Milwaukee residents with jobs in Waukesha County - within days of agreeing to help pay for a highway interchange in Oconomowoc, an almost exclusively white community. It eliminated and those areas with minority and low-income populations. “A Regional Transportation System Plan for Southeastern Wisconsin: 2035” (2035 Plan), SEWRPC (June 2006) at 576 (viewed 8/17/15 at http://www.sewrpc.org/SEWRPCFiles/Publications/pr/pr-049_regional_transportation_system_plan_for_se_wi_2035.pdf ). Thus the plan was intended to “provide better connectivity between central Milwaukee County residents, including minority and low-income populations, and employment and other opportunities in the outlying communities within the Region.” Id. All these recommendations were made in the context of ensuring that communities of color received a fair share of benefits of transportation system investments, and were included in the chapter evaluating the environmental justice compliance of the 2035 Plan. But instead, financial support and transit services have been eroded – something that SEWRPC explicitly recognized would have a discriminatory effect. Id. at 366, 592. By 2014, an estimated 30,000 fewer jobs in the region were served by transit than if the service that existed in 2001 had been in place. “Public Transit and Access to Jobs in the Milwaukee Metropolitan Area, 2001-2014” (UWM- Center for Economic Development, 2014) at 10 (viewed 8/18/15 at http://www4.uwm.edu/ced/publications/Transit2015_FINAL-1.pdf ); also see generally, Sean Ryan, “Locked out: Suburbs slow on affordable housing,” Milwaukee Business Journal (May 9, 2014) (viewed 8/25/15 at http://www.bizjournals.com/milwaukee/print-edition/2014/05/09/locked-out-suburbs-slow-on-affordable-housing.html ).


a route that connected the New Berlin Industrial Park to Brookfield Square (a location reachable by Milwaukee County transit) in 2010.41 It cut a route between Waukesha and Milwaukee County in 2011.42 And although it received a grant to purchase vans to set up a van pool, it not only failed to implement such a plan, but apparently did not even consider using the vans to help Milwaukee workers access jobs in Waukesha, which presumably would have been allowed under rules requiring a trip to begin or end in Waukesha County.43 Waukesha has also made clear its staunch opposition to the regional transit that is critical to achieve racial equity. For example, in 2010, the county board unanimously passed a resolution opposing creation of a Regional Transit Authority. Ex. O. Then in 2014, the Waukesha County board rejected elements of SEWRPC’s Housing Plan that were intended to ensure full implementation of the public transit provisions of the regional transportation plan – provisions which were also deemed crucial to addressing racial inequity in the region. See, e.g., Ex. K.

E. Job Migration Has a Discriminatory Effect.

The benefits of suburban job expansion and the burdens of urban job loss have not been evenly distributed. For decades, jobs have migrated from the city of Milwaukee - where disproportionate numbers of persons of color live and work - to disproportionately white suburban communities that have excluded them. As Mayor Zeidler noted, extending water to Wauwatosa in 1959 led to industrial development there rather than in the city of Milwaukee. In the 1970s, 42 businesses moved from the city of Milwaukee to New Berlin’s industrial park.44

Nor is this problem only in the past. While persons of color, especially African-Americans and Latinos, are concentrated in the central city, parts of the region with substantial

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44 See, e.g., Memorandum to Waukesha Water Utility at n. 1; “Analysis of the New Berlin Petition.”
employment opportunities – and a lack of affordable housing – “are located outside areas with the greatest concentrations of minority populations.” Housing Plan at 515. The failure to ensure equitable job access has created and exacerbated profound economic inequalities within the region. “On average black and Hispanic households earn significantly less per year than white households. Black/Non-Hispanic households in the four-County Milwaukee metropolitan area earned 45 cents for every dollar earned by whites, and Hispanic households earned 61 cents for every dollar earned by whites, based on median household incomes reported in the 2005-2009 ACS.” Housing Plan at 356.

Diverting water to Waukesha will exacerbate the problem. Waukesha’s major business organizations have advocated for water diversion for “economic development.” But Waukesha’s industrial areas are not readily (or at all) accessible to city of Milwaukee job seekers, especially the large and disproportionate number of persons of color – especially African-Americans - who depend on transit to access such jobs.

As also noted above, many industries in Waukesha rely on high-capacity wells, others use the Waukesha Water Utility, and as many as 8 to 10 new or expanding industrial users are anticipated. Because Waukesha refused to disclose the identity of those potential new industries who might use its water, Technical Memorandum at 5, it cannot be ascertained whether, as in the case of the New Berlin Industrial Park, it will lure even more industries (and their jobs) away from the city of Milwaukee and its workers who need those jobs.

This is not just a theoretical concern. In addition to the history of job out-migration, the city of Waukesha’s Comprehensive Plan projects a more than doubling of the land area for industrial development (from 921 to 1943 acres) between 2000 and 2035, as well as a significant increase in commercial and residential development. With respect to communities included in the expanded service area, the town of Genesee plans to expand the area for industrial usage nearly tenfold, the town of Waukesha to nearly quadruple the area for industrial usage, and the city of Pewaukee to more than double the land area for industrial usage, during that period. Providing diverted water to those communities will inevitably facilitate such development.

As the 2004 memo to the Waukesha Water Utility stated regarding a diversion to another Waukesha County city, the ‘sale of water to New Berlin will create competition for industrial development between Milwaukee and New Berlin that may result in a loss of industry and

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45 City of Waukesha Comprehensive Plan, Ch. 7 (Land Use Element), at 7-10 to 7-11 (projecting 24% increase in land for commercial development and 76% increase for residential development) (viewed 8/19/15 at http://www.ci.waukesha.wi.us/c/document_library/get_file?uuid=a3fc4b11-e352-4ae4-bcf1-31b69553cde8&groupId=10113 )

46 Waukesha County Comprehensive Plan, Ch. 7 (Land Use Element), at 7-20 and 7-30 (calculated from comparisons of 2000 and 2035 land for industrial purposes) (viewed 8/19/15 at https://www.waukeshacounty.gov/uploadedFiles/Media/PDF/Parks_and_Land_Use/Land_Information/Development_Plan/Chapter%207%20Land%20Use%20print%20ready.pdf )
related property tax revenues to Milwaukee.” Memorandum to Waukesha Water Utility at 1. That is equally – if not even more – true with respect to a water diversion to the City of Waukesha and its surrounding communities.

III. In Light of Pervasive Segregation and Discrimination – and in Light of a Reasonable Alternative that Serves Existing Users - the DEIS Must Evaluate Reasonable Alternatives to Constrain Sprawl.

It is one thing for a water diversion application to seek to serve an existing community that has no other alternative. It is quite another for a community to seek to divert water not only to meet its current needs, but to support and undergird industrial, commercial and residential expansion – especially when the benefits of that expansion exclude communities of color, especially African-Americans, in the region.

And the requested diversion is not needed to serve an existing “community” in need of water, as the Great Lakes Compact requires. As comments and studies submitted by others, such as the Compact Implementation Coalition, make clear, the city of Waukesha could meet its water needs without diverting Lake Michigan water. That it wants more water to support future growth and expansion in the city itself, and to serve a vastly expanded service area, does not justify the diversion. Thus, the environmental review process must consider the reasonable alternative of limiting growth and development in Waukesha, and of excluding the expanded service area, in evaluating the feasibility of other water supply alternatives.

Moreover, as discussed above, Title VI and environmental justice require consideration of the effects on communities of color, especially African-Americans, of diverting Lake Michigan water to Waukesha. The diversion application relies on a SEWRPC-drafted map that adds 17 square miles to its water supply service area - thus promoting growth not only in Waukesha, but also farther from Waukesha’s downtown, bus lines, public services, job market and somewhat affordable housing, into less-accessible parts of the city and into communities even more segregated than the city of Waukesha itself. It is clear that communities of color in

47 Waukesha may claim that its diversion will not have these adverse and segregative effects. The application, however, fails to address those issues, much less do so based on adequate, current information. Although Waukesha’s diversion application is based in significant part on SEWRPC’s Regional Water Supply Plan, and although that plan claims that population growth, racial and ethnic residential patterns and job growth would not be significantly affected by the diversion, see, “A Regional Water Supply Plan for Southeastern Wisconsin,” SEWRPC (Dec. 2010), Vol. 1 at 700 (viewed 8/26/15 at http://www.sewrpc.org/SEWRPCFiles/Publications/pr/pr-052-regional-water-supply-plan-vol1.pdf), those current patterns already perpetuate segregation and discrimination. In fact, the underlying “Socio-Economic Impact Analysis of the Regional Water Supply Plan for Southeastern Wisconsin,” Univ. of WI –Milwaukee Center for Economic Development (July 2010) at Ch. 7, pp 2-4 (viewed 8/26/15 at http://www4.uwm.edu/ced/publications/seianalysis_2010a.pdf ) confirmed the serious socioeconomic disparities that exit between the urban communities, such as Milwaukee, and the
the region – and especially African-Americans - will derive few (if any) benefits from diverting Lake Michigan water to these suburban communities, while the increase of suburban sprawl development will profoundly burden them. By failing to evaluate the possibility or potential effects of slowing or limiting growth in communities such as the City of Waukesha (e.g., by limiting the water service area to already-built locations), rather than of simply supplying all the water the receiving community wants to support its ambitious goals for substantial future growth and annexation, the DEIS and Technical Review not only ignore critical environmental laws, including the Great Lakes Compact itself, but they ignore the interrelated social and economic effects of those decisions and the racially discriminatory effects of doing so.48

At the same time, an adequate analysis that appropriately addresses civil rights issues must also consider the potential benefits that may accrue to communities of color in the region if suburban communities who want to obtain diverted water from Lake Michigan. As the report explicitly stated, “[t]he data indicate that over the past 50 years, there has been an outward migration of population and jobs from the large lakeshore manufacturing cities to the outlying counties, suburbs, and exurbs. The loss of a manufacturing-based economy and the movement of economic and development activity inland created a negative impact on jobs and income in the historic central city areas. . . Racial and ethnic minority and low-income populations have been disproportionately affected, and these populations have become increasingly concentrated in the cities of Kenosha, Milwaukee, and Racine.” Id. at 185-6.

Moreover, the Analysis was based on the understanding that development in Waukesha would be primarily infill and incremental growth. Id. at 187. As discussed supra Secs. II.A,E, however, it is clear that much more expansive growth is planned, growth that will inevitably further disadvantage communities of color in the region.

Finally, this Analysis recognized that these profound disparities could be addressed and alleviated by intergovernmental cooperation agreements between the suburban communities seeking water and the urban communities profoundly burdened by regional residential and job segregation, and explicitly stated that “[t]hese issues need to be addressed prior to an evaluation of each of the six recommendations under the RWSP.” Id. at 187 (emphasis added). That clearly did not occur.

48 As others, such as the Compact Implementation Coalition, have separately noted, the expansion of the City of Waukesha’s water service supply area to include communities which have no current or demonstrable future need for Lake Michigan water, and which have neither implemented water conservation programs nor adopted plans to do so in the future, makes the diversion application inconsistent with the Compact’s requirements. This is particularly true because SEWRPC’s conclusions regarding the lack of adverse effects of a diversion were expressly predicated upon technical and scientific information concluding that existing groundwater sources in southeastern Wisconsin, if properly managed, are of sufficient quantity and quality to support projected growth through the year 2035, and thus that there are reasonable alternatives to the supply of Lake Michigan water to other communities until at least 2035. Regional Water Supply Plan (Vol. 1) at 386.
diverted water is not provided to Waukesha and communities around it and growth is thereby limited. For example, because all industry requires some access to water, if Lake Michigan water is not sent outside Milwaukee or outside the basin, greater benefits are likely to accrue to the African-American residents largely excluded from Waukesha, by keeping water resources that attract and retain jobs and industry in Milwaukee. This is even more likely to be the case where, as now, the city of Milwaukee is seeking to use its access to water to attract industry back to the city, including industry from other parts of the country. 49 It also would be far more likely to provide jobs accessible by public transit in Milwaukee, reducing disparities in access to employment. Facilitating growth in Milwaukee, while limiting exurban expansion, might also reduce, or at least constrain, the substantial and increasing segregation in the region. Clearly, those would be benefits within the meaning of Title VI and environmental justice requirements. They certainly cannot be ignored.

The failure of Waukesha’s application, and of the DEIS and Technical Review, to address these issues is reason enough to deny the Application.

Respectfully submitted,

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Ex. B: Letter of Former Milwaukee Mayor Frank P. Zeidler (on file with City of Milwaukee Resolution 021758) (June 7, 2003)

Ex. C: “An Analysis of the New Berlin Petition for City of Milwaukee Water Services,” Milwaukee Dept. of City Development (March 1974)

Ex. D: Greater Milwaukee Association of Realtors (GMAR) Call to Action (Aug. 18, 2015)

Ex. E: Three articles regarding expansion of city of Waukesha, from Waukesha Freeman


Ex. G: Levine, Dr. Marc V., “Racial Disparities, Socioeconomic Status and Racialized Politics in Milwaukee and Wisconsin: An Analysis of Senate Factors Five and Six of the Voting Rights Act” (Oct. 18, 2013)

Ex. H: Table: “Hispanic or Latino origin of householder by race of householder,” (2010 Census Table H7)


Ex. K: Kori Schneider-Peragine, “[S]ide by side comparison of the SEWRPC Housing Study recommendations with the recommendations adopted by Waukesha County” (Oct. 2014)


Ex. M: Freeway Task Force Report (Milwaukee Dept. of City Development, June 1972)


Ex. O: “Enrolled Resolution 164-11 –Opposition to Include Waukesha County in the Regional Transit Authority for Southeastern Wisconsin,” Waukesha County Board (March 30, 2010)
Exhibit A
To: Waukesha Water Utility/Daniel S. Duchniak
Author: Barbara K. Boxer
Date: June 10, 2004
Client: Waukesha Water Utility (094350)
Subject: Arguments For and Against the City of Milwaukee Selling Water to
the City of New Berlin

The purpose of this memorandum is to summarize the arguments for and
against the City of Milwaukee ("Milwaukee") selling water to the City of New
Berlin ("New Berlin") based on a review of the City of Milwaukee file.
I. ARGUMENTS AGAINST SELLING WATER TO NEW BERLIN.
   A. Loss of Milwaukee Industry.

   The sale of water to New Berlin will create competition for
industrial development between Milwaukee and New Berlin that may result in a
loss of industry and related property tax revenues to Milwaukee. Milwaukee
experienced a loss of industry to New Berlin during the 1970's when 42 firms or
28% of the industries in the New Berlin Industrial Park moved from Milwaukee.¹

¹ City of Milwaukee City Clerk Office Legislative Reference Bureau Fiscal Staff, Feasibility of Sale of
Water from Milwaukee Water Works to the City of New Berlin (on file with Common Council of the City of
Milwaukee)(PowerPoint presentation on Resolution File No. 021758, authorizing the Proper City officials
to execute a water service agreement with the City of New Berlin).

MW1098351
The loss had a negative impact on Milwaukee's industrial assessment and resulting property tax revenues.² The sale of water to New Berlin could have a similar negative impact on Milwaukee industry during this decade.

B. **New Berlin's Lack of a Comprehensive Housing Strategy.**

The Common Council of the City of Milwaukee's ("Common Council") consideration of any proposed water sale includes but is not limited to an evaluation of various criteria.³ One criterion is the proposed buyer's comprehensive housing strategy. According to Common Council guidelines, a comprehensive housing strategy must encourage "racial and income diversification through integrated affordable housing opportunities."⁴ New Berlin did not have a comprehensive housing strategy at the proposal's inception. Subsequently, however, New Berlin agreed to create a plan to comply with the housing strategy requirement.⁵

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² City of Milwaukee City Clerk Office Legislative Reference Bureau Fiscal Staff, *Feasibility of Sale of Water from Milwaukee Water Works to the City of New Berlin* (on file with Common Council of the City of Milwaukee) (PowerPoint presentation on Resolution File No. 021758, authorizing the Proper City officials to execute a water service agreement with the City of New Berlin).
³ Agenda from Emma J. Stamps, Commissioner, Utilities & Licenses Committee to Utilities & Licenses Committee (March 11, 2003) (on file with the Common Council of the City of Milwaukee, File 020459).
⁴ Agenda from Emma J. Stamps, Commissioner, Utilities & Licenses Committee to Utilities & Licenses Committee (March 11, 2003) (on file with the Common Council of the City of Milwaukee, File 020459).
⁵ Letter from Julie A. Penna, Commissioner, Utilities & Licenses Committee to Common Council of the City of Milwaukee (April 25, 2003) (on file with the Common Council of the City of Milwaukee, Resolution File 021758).
C. **Lake Michigan Drainage Basin Limitations.**

Lake Michigan's drainage basin is limited; therefore, Milwaukee adopted the principle of not pumping water from Lake Michigan to communities on the west side of the subcontinent divide. The sale of water to New Berlin, which lies west of the subcontinent divide, would violate this long-standing principle and affect the limited capacity of the drainage basin.

D. **Urban Sprawl.**

The sale of water to New Berlin would encourage urban sprawl and affect the overall water supply. Lake Michigan's water supply should not be the remedy to problems that New Berlin's urban sprawl plans would create.

E. **Long-Term Consequences to Milwaukee.**

The sale of water to New Berlin would have negative long-term consequences for Milwaukee that the monetary benefits would not outweigh. The potential construction costs that Milwaukee could incur to expand water services, as well as disputes over future rates, could conceivably result in Milwaukee receiving much less of a financial benefit than projected.

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6 Letter from Frank P. Zeidler, former Mayor of Milwaukee to the Common Council of the City of Milwaukee (June 3, 2003)(on file with the Common Council of the City of Milwaukee). "There is a subcontinent divide about 3 miles due west of Milwaukee from downtown Milwaukee in which waters on the west side of this divide drain toward the Mississippi River and Gulf of Mexico."

7 Letter from Frank P. Zeidler, former Mayor of Milwaukee to the Common Council of the City of Milwaukee (June 3, 2003)(on file with the Common Council of the City of Milwaukee).

8 Letter from Frank P. Zeidler, former Mayor of Milwaukee to the Common Council of the City of Milwaukee (June 3, 2003)(on file with the Common Council of the City of Milwaukee).

9 Letter from Frank P. Zeidler, former Mayor of Milwaukee to the Common Council of the City of Milwaukee (June 3, 2003)(on file with the Common Council of the City of Milwaukee).
II. ARGUMENTS FOR MILWAUKEE SELLING WATER TO NEW BERLIN.

A. Ensure Stable Future Water Rates.

It is essential that Milwaukee continue to explore expansion options such as increasing the customer base to balance decreasing consumption and conservation measures by current customers.\textsuperscript{10} Expanding water services to existing service areas is more difficult and uncertain than expanding to incorporate and serve other established customer bases; therefore, selling water to neighboring communities is essential to "diversify potential revenue sources to ensure the stability of future water rates to all customers."\textsuperscript{11} Moreover, the sale of water to neighboring communities would provide an "essential public service" to those communities and would serve as a "critical economic asset" to Milwaukee.\textsuperscript{12}

B. Foster Regional Cooperation.

The sale of water to New Berlin will foster a "new spirit of cooperation that [will improve] the quality of life for the citizens of both communities." The water sale agreement would be a model for "regional cooperation" throughout Wisconsin, and would serve to encourage other communities to explore avenues for cooperative agreements.

\textsuperscript{10} Letter from Carrie M. Lewis, Superintendent, Milwaukee Water Works and Mariano A. Schifflaqua, Commissioner, Department of Public Works to the Common Council of the city of Milwaukee (May, 30, 2003)(on file with the Common Council of the City of Milwaukee).

\textsuperscript{11} Letter from Carrie M. Lewis, Superintendent, Milwaukee Water Works and Mariano A. Schifflaqua, Commissioner, Department of Public Works (May, 30, 2003)(on file with the Common Council of the City of Milwaukee).

\textsuperscript{12} Letter from Carrie M. Lewis, Superintendent, Milwaukee Water Works and Mariano A. Schifflaqua, Commissioner, Department of Public Works (May, 30, 2003)(on file with the Common Council of the City of Milwaukee).
C. New Berlin's Other Purchasing Options.

If Milwaukee decides not to sell water to New Berlin, New Berlin will seek a contract with an intermediate wholesaler such as Wauwatosa or West Allis.\textsuperscript{13} Milwaukee, therefore, would not benefit from the revenue generated from the sale of water. Other neighboring communities would benefit and potentially the same issues that are of concern to Milwaukee could exist; West Allis could use the monies to entice industrial development from Milwaukee. If Milwaukee, however, sells water to New Berlin, Milwaukee would have a greater level of control over uses of the water or at least profit from the water sale.

D. Cooperation Compacts for Government Services.

Although not offered specifically as an argument for selling water to New Berlin, information on cooperation compacts for government services was included in the file. There are currently several compacts between Milwaukee and neighboring communities for services such as the recycling and street maintenance.\textsuperscript{14} This sharing of resources benefits both Milwaukee and its partners. Arguably, an agreement to sell water to neighboring communities is not very different from intergovernmental compacts that have proven successful and model the spirit of regional cooperation essential to building a stronger Wisconsin.

\textsuperscript{13}Analysis from Emma J. Stamps, Fiscal Analyst Senior, \textit{Analysis of Sale of Water to the City of New Berlin}, (revised April 21, 2003)(on file with the Common Council of the City of Milwaukee).

\textsuperscript{14}Letter from Laura J. Engan, Budget and Management Director, Department of Administration (April 29, 2002)(on file with the Common Council of the City of Milwaukee).
CONCLUSION

In March 2003, the Common Council authorized the negotiation of an agreement for the sale of water services to New Berlin.\footnote{Substitute resolution authorizing the proper City officials to execute a water service agreement with the City of New Berlin (March 18, 2003) (on file with the Common Council of the City of Milwaukee, Resolution File No. 021758).} Although there were several arguments presented against selling water to New Berlin, the idea of "regional cooperation" appeared to have prevailed over those arguments. Moreover, the fact that New Berlin was within the water shed because of its surface water, not ground water flow was a deciding factor. Also, that New Berlin was obtaining water for only the area of New Berlin within the water shed was most helpful. The "regional cooperation" argument does not guarantee success on Waukesha Water Utilities' proposal to buy water from Milwaukee, but gives considerable insight into strategies that may help advance the proposal for Waukesha.

As we have previously discussed, an approach based on a regional tax concept that tied economic development of the suburbs to a per unit dollar return to Milwaukee may overcome many of the arguments against Milwaukee's sale of water. I would suggest we research what and how other cities/regions have used a regional tax approach. Please advise if you would like me to undertake this research.

cc D. Gallo
Exhibit B
FRANK P. ZEIDLER  
2921 North Second Street  
Milwaukee, Wisconsin 53212

June 7, 2003

The Honorable, the Members of the Utilities and Licenses Committee  
The Common Council  
City of Milwaukee  
City Hall  
200 E. Wells St.  
Milwaukee WI 53202

Honorable Members of the Utilities and Licenses Committee:

This letter concerns Resolution 021758, a resolution authorizing the proper City officials to execute a water service agreement with the City of New Berlin, Wisconsin, Water Works. It occurred to me that your committee might find interest in some of the background of previous City of Milwaukee policy on selling water service outside of its city limits. I speak from having been in the position of Mayor of the City of Milwaukee from 1948 to 1960, a period in which the city expanded from 46 square miles to about 96 square miles, partly on the basis of having a water police of selling no water to new areas unless they became incorporated in the City of Milwaukee.

This policy was one established by predecessor Mayors and Aldermen. I understand it arose about 1910 when the Village of West Milwaukee, after having received Milwaukee water service, won a legal victory of not having to join the City, although this was supposed to have been the agreement. Thereafter until 1959 Milwaukee followed the policy of not serving water outside its city boundaries with a view of discouraging flight of industry and commercial establishments to other communities who offered lower taxes. Without this policy Milwaukee now might have been a municipality of about one quarter its size with the lowest valued residential areas.

This history of Milwaukee's growth speaks to a need for caution on extending city services, especially water service beyond the city boundaries so that industrial and commercial establishments are not encouraged to flee the city.

When in 1959 the City was legally challenged to supply water to Wauwatosa and yielded, industrial developments that might have occurred in Milwaukee occurred in the northwest corner of Wauwatosa and are quite evident now.
In the issues over water supply, another principle guided earlier Milwaukee City governments. This was the principle of not pumping Lake Michigan water out of areas whose natural drainage goes to Lake Michigan. There is a subcontinent divide about 8 miles due west of Milwaukee from downtown Milwaukee in which waters on the west side of this divide drain toward the Mississippi River and Gulf of Mexico. Lake Michigan drainage basin is quite limited. It was for this reason that the City of Milwaukee had a running legal dispute with the City of Chicago which was draining Lake Michigan to flush its waste water down the Chicago River ultimately to the Mississippi. To supply all of New Berlin with Lake Michigan water would violate this principle, since much of New Berlin lies on the west side of the subcontinent divide. I do not think that this principle should be breached in any contract with any community.

Even later historically, the issue came up of whether extension of city water and sewer services to unplanned urban sprawl as seems to have characteristicized so much of the counties adjacent to Milwaukee should be encouraged by Milwaukee. This sprawl of extra large dwellings on very large lots which are nevertheless high users of ground water has produced a major ecological problem which the City of Milwaukee is now being asked to remedy. What this situation demands is a regional water policy which prevents urban sprawl, prevents industrial plant raiding by communities and which does not impoverish the central city by encouraging its industries and commercial establishments to leave. Such a plan does not exist to my knowledge. I therefore would encourage the members of your committee to make further study of the development of a major water use plan for Milwaukee and the surrounding municipalities which the legislature allowed to incorporate despite their lack of being able to serve their own residents.

Concerning the mode of water service delivery to suburban regions, the question also arises as to whether water service delivery to New Berlin will produce demands on the City of Milwaukee to send its water supplies even farther and to other municipalities and townships which are allowing urban sprawl. This even raises the hint of other states demanding water from the Great Lakes to serve the needs of communities farther west.

The request of the City of New Berlin opens the need for a proper study and development of the water needs of Southeastern Wisconsin and for a master plan to meet them without encouraging flight from Milwaukee. Such a study should be done quickly before any major change in past policy of serving water outside Milwaukee city limits be addressed.

A final note of caution. The announced benefits of financial benefit from water sale to suburban communities needs also to be treated with caution. Construction costs as well as disputes over future rates could conceivably result in the City of Milwaukee receiving much less financial benefit that currently projected.
Respectfully,

Frank P. Zeidler

Frank P. Zeidler
Exhibit C
AN ANALYSIS OF THE NEW BERLIN
PETITION FOR THE CITY OF
MILWAUKEE WATER SERVICES

Prepared for the
Common Council's Committee
on Utilities and Licenses
by the
Department of City Development

March, 1974
To the Honorable
Common Council Committee on
Utilities and Licenses
City Hall, Room 205
City of Milwaukee

Gentlemen:

The Department of City Development has completed and is herewith forwarding its report on the potential economic impact of selling city water to New Berlin for resale to that city's industrial and commercial enterprises. As detailed in the report, many of these establishments have been formerly located in the City of Milwaukee. Although there is no known technique which can be used to pinpoint a precise statistical relationship between city water available and the future relocation of Milwaukee industry to New Berlin, it is believed that an adverse effect is highly probable.

During the early phases of our research on this important topic, it readily became apparent to the Department's technicians that the New Berlin petition for water services was by no means just another one of the type the Council has received in the past. This petition, for example, involves grave issues of national and international law as a result of the existence of a major subcontinental divide thru New Berlin. New Berlin's petition also raises serious questions related to previous Common Council policies concerning suburban use of exclusionary zoning practices to keep out moderate and low income families. Perhaps most significantly, the Department's research led to consideration of several important policy questions concerning the interface of multi-governmental capital improvements programming in the metropolitan area which were felt to be related to the question at hand. However, because of the high policy level at which these issues are more appropriately considered, we have discussed these questions in only very general terms.
This report refers several times to the Metropolitan Sewerage Commission's previous decision to establish service area limits well to the west of the recognized subcontinental divide in New Berlin. It should be noted that the location of this important geographic feature is subject to a difference of technical opinion and that the Department is not implying that the Sewerage Commission's action was in any way questionable. At the same time, the Department could not fail to note, with some disappointment, that New Berlin has gained an industrial development windfall from the Commission's decision.

In the same sense, the Department's recommendation that hard cost/revenue estimates be studied prior to the Council's decision on New Berlin water is likewise not in any way intended to second guess the Water Department, but rather to insure that all facets of this decision be understood before it is made. In the final analysis, the Department of City Development is not encouraged that the overall fiscal impact of a decision to sell New Berlin city water is in Milwaukee's best interests. Based on that city's previously negative attitude towards sound regional planning guidelines and its commitment to expand its industrial tax base at the expense of its neighboring municipalities (New Berlin does not conduct national or state-wide promotion efforts as does the City of Milwaukee), we would expect more of the same after our water services were extended.

Sincerely,

[Signature]

Edward J. Hayes
Commissioner

Enclosure
AN ANALYSIS OF THE NEW BERLIN PETITION
FOR THE CITY OF MILWAUKEE WATER SERVICES

Prepared for the
Common Council's Committee
on Utilities and Licenses
by the
Department of City Development

March, 1974
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SUMMARY OF FINDINGS

New Berlin's industrial development program over the last ten years has been enhanced by a combination of factors that may have been unique to that municipality during that period. Among the factors that may have encouraged new plant location there, highway accessibility, low property taxes, vigorous industrial park promotion, availability of large tracts of cheap land, the personal location preferences of management and the existence of suboptimal conditions in the City of Milwaukee were probably most significant.

Between 1963 and 1970, industrial land use grew 580% in New Berlin, the highest rate in Southeastern Wisconsin. Of the 530 acres in the New Berlin Industrial Park, approximately 28% is currently occupied by firms which were formerly located in the City of Milwaukee. These firms represent a foregone hypothetical City of Milwaukee assessment for real and personal property of approximately $14.6 million, which would have produced $1.2 million in 1974 property tax revenues for city purposes and for the city's share of county and metro levies. Combined with similar but much smaller estimates for the Moorland Industrial Park, it can be said that about $1.32 million in annual tax revenues could be considered "lost" to city taxpayers because these firms left Milwaukee and relocated in new plants in New Berlin.

New Berlin's industrial expansion potential in the future is also significant. With roughly 2,170 gross acres
of undeveloped industrial and light manufacturing land available, compared to roughly 2,400 in the entire City of Milwaukee with 23 times the population, that city can easily accommodate the potential projected demand of an additional 680 acres by the year 2000, if this estimated demand materializes. Assuming that 25% of the potential is realized by relocation of Milwaukee companies, an additional $1.1 million of tax revenues could be "lost" to city taxpayers annually.

However, New Berlin's future industrial growth will be determined by a number of variables, not least the availability of dependable supplies of filtered water. Extension of City of Milwaukee water to New Berlin will undoubtedly increase New Berlin's industrial land marketing potential. At the same time, New Berlin is amply supplied with groundwater which can only be utilized by costly deep well drilling.

Because of the probable loss of industry from Milwaukee estimated "profits" from water sales to New Berlin, should, in the Department of City Development's opinion, be carefully projected and evaluated prior to Council action on this petition. The Department also believes that the serious legal implications of the existence of the Great Lakes-Upper Mississippi Subcontinental Divide thru New Berlin should be cleared up prior to this decision because of the possibility that the City of Milwaukee may become a party to litigation on this question.
The Department also suggests that the Common Council consider the fact that piecemeal extension of city water services is resulting in a modified metropolitization of this vital service without a quid pro quo. In this respect, a "fair share" distribution of moderate and low income housing could be considered in the city's bargaining posture. New Berlin's minimum zoning requirements, for example, can be shown to constitute significant financial barriers against construction of housing for low and moderate income families. The Common Council has clearly stated its opposition to this type of suburban manipulation of zoning and building controls on several occasions.

RECOMMENDATIONS

1. A detailed estimate of costs and revenues from the proposed sale of water to New Berlin should be developed for the purpose of evaluating the projected trade-offs between estimated Water Department surplus revenues or "profits" and further industrial migration from the city.

2. Legal questions surrounding the issues raised by the existence of the major subcontinental divide in New Berlin should be clarified with respect to both sewerage and filtered water diversions between the Great Lakes and the Upper Mississippi Drainage Basins, prior to action on New Berlin's petition.
3. Diversion of Great Lakes Basin waters, i.e., City of Milwaukee filtered water, should be avoided on the basis of previous legal principles supported by the city. Adherence to this principle by Milwaukee and New Berlin would not preclude some benefit to industry in New Berlin but would reduce the visibility of this benefit and hence would reduce Milwaukee's opportunity cost of losing more industry that it otherwise might.

4. The Department respectfully suggests to the Common Council that a suitable quid pro quo for future city water extensions into the suburbs, in the absence of a larger agreement on metropolitanization of other services disproportionately supported by city taxpayers, might be a suburban commitment to a "fair share" of moderate and/or low income housing.
INTRODUCTION

The decision to extend City of Milwaukee water service to an incorporated suburb such as the City of New Berlin involves, in the opinion of the Department of City Development, consideration of two important criteria. First, will the extension of service adequately compensate City of Milwaukee residents and businesses, the "stockholders" in the city's water services operations, by yielding a reasonable return on invested capital, after all capital and operating costs associated with the service extension are covered by the suburb in question? Second, will the extension of service also meet the requirements of the first criterion after the longer range, indirect impacts of the decision are felt on the city's property tax base and its overall fiscal posture?

While this report primarily attempts to answer the second of these two critical questions, a limited discussion of the first was felt to be appropriate to the Department's assignment.* Also, noting the lack of additional substantive material on this important question in File No. 73-1103, the Department took the liberty to address several aspects of the larger Metropolitan Milwaukee environment within which this water petition is just one of many important elements.

Because of the deep concern expressed by the Committee on Utilities and Licenses that the extension of city water to New Berlin could lead to an accelerated pace of business relocation from Milwaukee (which concern is shared fully by

* See Appendix A.
the Department) this report explores this issue at some length. However, as demonstrated in the following section, comparative industrial development climates are ultimately evaluated by the business community on the basis of many separate considerations, all of which have some effect on location decisions.

I. New Berlin's Industrial Development Climate and The Outward Migration of Milwaukee's Industry

In the detailed discussion that follows, several visible features of the City of New Berlin's industrial development climate of roughly the past decade are explored in some detail. These issues are presented here for the reason that despite repeated and highly sophisticated attempts to quantify the site selection decisions made by private enterprise across the United States, plant location theory still remains a rather inexact science. To the best of our knowledge, no serious study of industrial location theory has yet succeeded in identifying any one unique factor that, taken alone, can be called "The Reason" a factory or a warehouse is constructed in this municipality or that one.

However, the Department of City Development's years of experience in dealing with the Milwaukee business community has produced a general understanding of the optimum environment prized by industrial management in its location decisions. In this respect, the Department must admit, with regret, that New Berlin's industrial location climate over the past 10 years may have been favorably considered by industry under certain
conditions that may take precedence in the mind of the manager of a firm. Milwaukee's industrial location climate, on the other hand, has not always been as attractive as it is today. The following six conditions should be viewed from this dynamic chronological perspective and not as permanent features of the metro area's competitive business location environment.

A. Transportation System Advantages

New Berlin has been placed in an extremely favorable posture, vis-a-vis the location and the fiscal impact of its highway access as a result of actions taken by state and regional highway planners over the last decade. The road network shown on the several maps contained in this report demonstrate part of the extent of the highway service quality available to industrialists in that city. To that city's immediate north is I-94 with good connections to all of Metro Milwaukee, Madison and points northwest. The Rock Freeway, (State Highway 15) crosses the city on the south, and provides direct and almost totally uncongested access to the Zoo, Airport and North-South Freeways, and by extension to the Port of Milwaukee, Chicago and points east, and central Illinois. In the event that the Belt Freeway is constructed across New Berlin, as has been recommended by state and regional highway planners (and which is given serious consideration by industrialists) New Berlin's freeway access system, all things considered, may be the most favorable in the State of Wisconsin and perhaps the Midwest.
The significance of this extensive service network, however, lies as much in its fiscal aspects as in its engineering. Of critical concern for example, is the fact that a freeway constructed over vacant or agricultural land is significantly less damaging to a municipality's tax base than a similar project would be thru a built-up area. Also, vacant land adjacent to the freeway can be expected to increase substantially in value while developed land values may actually decline during the planning and construction stages of a freeway project. The social costs of freeway or highway construction in rural or urban fringe areas are also dramatically lower there than they could be in the city - relocation housing problems are non-existent, etc.

In addition to these factors, New Berlin's highway accessibility is financially supported largely by state and federal dollars and only insignificantly by New Berlin property taxes. Because of this, convenient highway access, highly prized by industry, is but one of those features of New Berlin's environment that encourages plant location; trucks and employees can travel freely through New Berlin at little or no direct property tax cost to the firms located there.

On the other hand, the provision of New Berlin's favorable accessibility to the entire metropolitan area, particularly its uncongested freeway linkages, has placed severe financial burdens on Milwaukee County and particularly the City of Milwaukee. Continued out-movements of plants to New Berlin and Waukesha County, and hence growing daily migrations of workers back and forth from these plants, will no doubt lead to demands for more freeways in the future.
B. Property Taxes

New Berlin has consistently had one of the lowest effective property tax rates in the Milwaukee Metropolitan Area. This is due in no small part to New Berlin's ability to avoid financial responsibility for transportation system investments and maintenance. But this issue goes beyond highways. Several of these additional considerations are treated in some detail elsewhere in this report and only highlights will be summarized here. Among other factors leading to New Berlin's low property tax rates over the last ten years these are noteworthy:

- Exclusionary zoning out of moderate and low income families;
- Accessibility to Milwaukee County and City of Milwaukee services, such as parks and public institutions, and a notable lack of tax exempt land and buildings in that city;
- Assessment of large areas of undeveloped land on municipal tax roles;
- Traditionally low levels or out-right rejection of municipal services.
Rapid recent growth of industrial and manufacturing property tax assessments.

These points raised have not been introduced for the purpose of promoting the New Berlin civic life style as a way of reducing property taxes, but to highlight some of the reasons that property taxes in New Berlin have been low in the past ten years or so.

If, on the other hand, many of these factors portend anything for the future of New Berlin's tax climate, it is that it is quite probable that that municipality may not be so favorably blessed with low tax rates in the future.

For example, there is little doubt that New Berlin's businesses and residents will begin to demand a growing list of services so far not provided by their city and county officials. Services such as intensified police protection; new schools; flood prevention controls; increased traffic engineering services; better building inspections; better property assessments; more intensive pavement repairs; new recreation programs, etc., are all likely to be demanded in the near future. Continued labor force recruiting problems, on the other hand, are very likely to encourage some of that city's employers to question the zoning policies that prevent their workers from living close to their jobs and which force them to travel many miles by automobile in the face of gasoline rationing and skyrocketing gasoline prices.
C. **Private Professional Industrial Land Development Promotion**

On several occasions during the last few years, the Comprehensive Development Division has reported on the wide disparity between the aggressive suburban industrial land promotion programs being carried out by metropolitan area developers compared to their minimal activities in the City of Milwaukee. In the spring of 1972, for example, it was pointed out that while approximately 1,830 acres of private or quasi-private industrial park lands were developed and were being vigorously promoted by private developers in the city's suburbs, only 185 acres had been similarly developed in the entire City of Milwaukee, exclusive of the Land Bank.

During the 1960's and early 1970's, New Berlin was the focal point of industrial land development initiative and promotion in the Milwaukee area. Assisted and encouraged by City of New Berlin officials, private sector promotion of the New Berlin Industrial Park and the adjacent Moorland Industrial Park led to an industrial building and expansion boom unprecedented in the Milwaukee Metropolitan area. Even granted that many of the firms which located there during the 1960's were driven out of the City of Milwaukee by freeway acquisitions, etc., it is nevertheless true that the success experienced by the major industrial development companies in New Berlin and other suburbs was significantly affected by the priority status under which these
companies located new tenants. In the private sector-
public sector type of partnership that New Berlin's
early competitive advantage has made the standard indus-
trial development model in Metropolitan Milwaukee, it is
difficult, if not impossible, for the private partner
to serve two masters. Hence, he must almost unavoid-
ably favor one of his client municipalities over the
other.

The New Berlin private sector-public sector industrial
plant location promotion program, on the other hand, has not
always enjoyed the high level of generous resident support
that has been the key to Milwaukee's success in this field.
Many New Berlin residents, for example, objected to the
wholesale zoning of huge tracts within that city for
future industrial expansion. Others could foresee the
day when truck and employee traffic would congest their
street systems. Still others were dissatisfied with
delays in getting needed sanitary sewer services while
the industrial parks were given favorable treatment.

Discontent has been heard from the other side also,
with the industrialists questioning the wisdom of non-
professional fire fighting services and generally limited
police surveillance among other problems. Milwaukee area
companies have in fact been accustomed to receiving a high
level of service from the City of Milwaukee and expect no
less when they move to the suburbs (despite their reasons
for moving).
D. **Availability of Large Tracts of Vacant Land**

In a recently agricultural area like New Berlin, provision of huge land areas for exclusive use for industrial development purposes is a relatively easy municipal function. In New Berlin, for example, it was a relatively simple matter to draw lines on a map and declare this or that large tract an M-1 or an M-2 district. In point of fact, New Berlin may already have established one of the highest industrial land districting proportions in the state, if not the country.

Note that this was done between 1962 and the present over not only the bitter objection of the Southeastern Wisconsin Regional Planning Commission but over the objections of many New Berlin residents as well. During the eight year period between 1963 and 1970, for example, New Berlin's industrial land use grew an amazing total of 580% as compared to only 12.1% in the City of Milwaukee and 25.6% in all Southeastern Wisconsin.* By March of 1973, according to measurements made from the most recently revised City of New Berlin zoning map, approximately 123,000,000 square feet of land was zoned for light or heavy industrial use, a figure that is convertible to about 2,820 gross acres. Of this 2,820 gross acres, approximately 2,170 are undeveloped. By comparison, at the end of 1973, the entire City of Milwaukee, with roughly 23 times the population of New Berlin, had only approximately 2,400 gross acres of undeveloped industrial or manufacturing zoned land.

*SEWRPC, The Economy of Southeastern Wisconsin, Technical
The existence of huge contiguous industrial tracts is a major advantage for industrial development purposes: maximum use can be made of existing railroad main line trackage; residential and commercial encroachment can be prevented; detailed land subdivision is enhanced; residential rezoning pressures are minimized; and, perhaps most significantly, the existence of huge overhanging supplies of similar quality land has a generally depressing effect on market prices in the same relative locations.

E. Personal Location Preference of Top Management

The staging of the Milwaukee area's freeway system construction facilitated, encouraged, and in some cases of right-of-way acquisition, directly fostered the migration of industry to suburban locations. This program also facilitated and encouraged the movement of upper income families away from the city. It is only in recent years that industrial location theory has begun to recognize the extremely important effect that the personal preferences of one or several top management people in a particular firm can have on the final decision to locate a factory or a business office.

This variable, call it the "Executive Privilege Effect" for want of a better term, enters the plant location decision process because the owner, the president, the top management team, or the plant manager of a company,
prefers to have his place of business located for his personal convenience with respect to his living quarters. All things being equal, for example, the president of a manufacturing corporation who lives in Brookfield or Elm Grove would find it more convenient to get to his office in Brookfield, Wauwatosa or New Berlin than he would if it were located in the Menomonee Valley or the Land Bank. At the same time that this so-called Executive Privilege Effect may not be the single most important plant location criterion, its existence, in concert with the dramatic growth of upper income residential settlement in Waukesha County during the last 20 years, must be considered one of the significant features of New Berlin's recent industrial location environment.

F. Milwaukee's Industrial Climate in Past Years

In fairness to those industrialists who have made, in their opinions, reasonable and objective decisions to move their plants out of the Central City, it must be recognized that during the last two decades there did exist a set of circumstances in Milwaukee which could have been interpreted unfavorably by industry and which may have been identified as constraining factors in our industrial development climate. In no particular order of importance, the following factors have been referenced by various local businessmen as past problem areas within the City of Milwaukee:

1. Comparative Property Tax Rates - fiscal reforms at the state level in the past several years will have done much to eliminate this problem;
2. Lack of available space for expansion and difficulty in assembling land parcels in the city's mature industrial districts;

3. Forced relocation of businesses as a result of freeway acquisition programs in the developed areas of the city;

4. Uneasiness about social conditions (particularly in 1967 and 1968) and the perceived threat of vandalism;

5. Comparatively high land costs - superior city services and multiple land use competition have tended to push city land values higher than those in the suburbs;

6. Lack of adequate industrial park environments - industry has come to expect better treatment of its environment; the Milwaukee Northwest Industrial Park is intended to overcome this problem;

7. Obsolete buildings and the standardization of single story, horizontal production processes;

Note that Milwaukee was by no means unique among major central cities with respect to these constraints during the post-war period. On the other hand, few major cities have been more agressive than ours in their attempts to eliminate or reduce the impact of these universal problems on industrial location. Taken in conjunction with the favorable effects of recent state fiscal reforms, our city's agressive industrial development program has a growing and positive effect on the area's business community.
positive effect on the area's business community. While it must be recognized that the City of Milwaukee cannot hope to be all things to all businesses, it is the Department's opinion that the city's image, vis-à-vis industry, is much better than it had been, say ten years ago, when affirmative action programs were first coming on stream. At the same time, some firms and some businessmen in the past did, in their opinion, move out of the city on the basis of a rational assessment of one or a combination of those constraining factors noted.

Summary

New Berlin's industrial development program has been enhanced by a combination of factors that may or may not have been unique to that municipality for the period of roughly the last ten years. Among these factors, the following have been identified as at least contributing if not casual variables in that city's ability to pull industry out of, or away from Milwaukee:

1. The physical and fiscal composition of New Berlin's transportation access system;
2. A significant property tax differential vis-à-vis the City of Milwaukee (which has begun to diminish);
3. Vigorous promotion of New Berlin's industrial parks by private developers in concert with preferential treatment by city officials;
4. Availability of large tracts of relatively cheap vacant land;
5. Personal location preference of top management -
the "Executive Privilege Effect;" and

6. Existence of constraining factors in the City of
Milwaukee during the last several decades.
II. FORMER MILWAUKEE BASED INDUSTRY IN NEW BERLIN

In light of the complex relationships that exist in the metropolitan area with respect to the number of companies that have multi-plant operations, often in multi-municipal locations, estimating procedures designed to measure "the amount of former Milwaukee industry in the City of New Berlin" require that a certain amount of judgmental screening be done in order to arrive at realistic statistical conclusions. Companies such as Goodyear, Gimbels, General Electric, Armor, WEPCO, Wisconsin Telephone, W.A. Krueger, Louis Allis, and A.O. Smith, for example, were felt by the Department to be of a nature that precluded their being described as "former Milwaukee" companies.*

For the purpose of developing the following statistics, data associated with these plants as well as data related to multi-location retail or service outlets, such as Kuglitsch's and Chappies, and other occupants of New Berlin's industrial parks such as the Moorland Tennis Club, the Southwest Bank, and the City of New Berlin, were also excluded.

A. New Berlin and Moorland Industrial Parks

The New Berlin Industrial Park is platted in 114 parcels ranging in size from less than 1 to 51.5 acres. Records supplied by New Berlin indicate that at the end of 1973, 24 of these parcels were either vacant, were owned by

* At the same time, however, it must also be recognized that the branch or subsidiary plants of these firms could relatively easily have been located within the city and that their existence in New Berlin generates property tax revenues there and not in the City of Milwaukee.
large multi-plant, corporations, were used by the City of New Berlin, or were used for retail outlet purposes, leaving a total of 90 parcels in the appropriate domain of this analysis.

Of the 90 built-up parcels considered for inclusion in this study, 41 have been identified as being owned by firms which were known to have had previous Milwaukee locations during the period between 1960 and the present.* In addition, at least seven other firms, identified as formerly located in the city, are located as tenants in the park.

The 90 parcels considered for inclusion in this study take up 317 of 530 total acres in the New Berlin Industrial Park or about 60% of the total available land area. Of these 317 acres, 149.2 acres have been identified as being owned by former City of Milwaukee firms, or 47% of the acreage considered relevant to this study and 28% of the total acreage of the park.

Those New Berlin Industrial Park firms identified as previous City of Milwaukee companies comprise a total estimated 1973 full market real estate value of $14,100,000.** At the City of Milwaukee's industrial real property assessment ratio, 51.6%, the $14.1 million figure would convert to a hypothetical City of Milwaukee real property assessment of just under $7.3 million. The addition of an

* This information was developed by referencing past year's Wright's City Directories.

** Based on a survey of New Berlin real property tax roles converted at an assessment ratio of 58%.
estimated personal property assessment of value equal to assessments on real estate, doubles the estimated $7.3 million assessment figure cited above, and produces a hypothetical equivalent total property tax assessment of $14.6 million. This figure represents what those former Milwaukee firms would have contributed to the city's 1973 tax base, if in fact they had built their new plants in the city rather than New Berlin, and if all other things, such as land value, were to have remained the same.

At 1974 City of Milwaukee property tax rates for Common Council and School Board purposes and the city's estimated share of county, MATC and Sewerage Commission levies, this total hypothetical assessment would have produced an additional gross property tax benefit to city taxpayers of just under $1.2 million. In other words, if these former city companies had relocated their new plants in the City of Milwaukee, rather than in the New Berlin Industrial Park, all other things being equal, City of Milwaukee taxpayers would have benefited to the extent of about $1.2 million.

Similar screening and research calculations concerning the Moorland Industrial Park, which is not as far in its development staging as the New Berlin, yield an additional hypothetical City of Milwaukee property tax revenue opportunity cost of roughly $123,200.*

* Exclusive of facilities such as the A.O. Smith Computer Center, which were screened out of the estimating procedure for various reasons cited above. The Moorland Park is still growing and hence assessment estimates would be sensitive.
When this figure is combined with the estimates developed for the New Berlin Industrial Park, it can be said that approximately $1.32 million in annual tax revenues could be considered "lost" to city taxpayers because these firms left Milwaukee and relocated in new plants in New Berlin.

B. Potential Industrial Expansion in New Berlin

The City of New Berlin has approximately 2,820 gross acres of land currently zoned for light manufacturing and industry. Of this total, approximately 850 acres lie within the combined limits of the New Berlin and the Moorland Industrial Parks. As of December, 1973, approximately 108 net acres in the New Berlin and approximately 87 net acres in the platted portion of the Moorland Park were vacant, a total of 195 acres. In the rest of New Berlin, including phase 3 of the Moorland, roughly 2,170 additional gross vacant acres are currently zoned for industry. At 80% utilization, this figure reduces to about 1,710 net acres, giving New Berlin roughly 1,900 net vacant industrial and manufacturing acres for overall future development.

Because of the number of variable and unknown factors which may eventually influence the New Berlin industrial development environment, projecting potential outmigrations of industry from the city to New Berlin can only be a very inexact undertaking. During the last 10 years, for example, roughly 28% of the total area of the New Berlin
Industrial Park was absorbed by former city firms. In light of the Department's expectation that the City of New Berlin's comparative industrial climate, vis-a-vis Milwaukee's, will not be as favorable in the future as it has been in the past, we estimated that something in the neighborhood of 25% of the New firms they acquire will be relocated from the city.*

Between 1963 and 1970, the period during which the New Berlin Industrial Park experienced its initial development movement, industrial land use in the City of New Berlin grew from 31.65 to 215.04 acres, or a net increase of 183.4 acres.** Although these figures represent growth of 579.4%, which was the highest in Southeastern Wisconsin, it represents only about 26.2 acres per year on an average annual absorption basis. SEWRPC projections for Southeastern Wisconsin employment growth until the year 2000 indicated that Waukesha County's proportion of total regional employment will increase the most of any county. However, no hard evidence is available to indicate expected industrial employment growth in the City of New Berlin. For a variety of reasons, the Department estimates that New Berlin's realized industrial land absorption potential between now and the year 2000 will be

* Excluding large multi-plant firms and retail outlets.

approximately similar to their experience of during the 1963-1970 period:

At an average growth rate of 26.2 net industrial acres per year, New Berlin can be expected to increase its developed industrial lands by approximately 680 acres by the year 2000. It is anticipated that approximately one fourth this growth, or 170 acres, will be due to the relocation of what can be considered "Former Milwaukee Firms" (i.e., exclusive of the facilities of large, multi-plant companies, utilities, retail outlets, etc.). Based on an estimated full value of $94,500 per acre (in 1973 dollars) real property development potential of the projected 170 acres of "Former City" firms would amount to approximately $16,100,000. At Milwaukee's 1973 assessment ratios and 1974 tax rates, as described above, an estimated $687,000 in tax payments on real property, and $376,000 on taxable personal property, excluding machinery and equipment, a total of roughly $1.1 million in tax revenues, would hypothetically be lost and would, therefore, not benefit other city taxpayers in any year in which this full development was completed.

As noted, the preparation of these types of projections can only be accomplished through the use of relatively

* 1963-1973 absorption rates, overall, were somewhat higher than the similar rates for '63-'70. This was probably due in part to the effect caused by the opening of the Moorland Park, the expected lagged time between land purchase and development in the New Berlin Park, and the lack of improved Industrial Park acreage in the City of Milwaukee.
crude forecasting techniques. Actualizations concerning the future course of events in the National and International economic scene, regional competitive conditions, trends in New Berlin tax rates and the quantity and quality of their services to industry, plus many other factors, will ultimately determine true growth patterns in that city. Not least of these other factors, of course, will be the relative industrial development climate within the City of Milwaukee itself.

C. Summary of Projected Industrial Relocation from Milwaukee to New Berlin

During the period between 1974 and the year 2000, New Berlin's overall industrial development base is projected to increase at the rate of 26.2 developed acres per year. With approximately 1900 net vacant acres now zoned for industry and manufacturing, and assuming that it will continue to give industry top priority public improvements considerations, New Berlin could accommodate 680 acres of potential new development if this demand actually materializes. If, as the Department has estimated, 25% of this new growth takes place as a result of relocation of City of Milwaukee firms, by the year 2000 the annual loss of tax revenues to Milwaukee will hypothetically approach the figure of $1.1 million. This $1.1 million loss would be in addition to the estimated tax revenues hypothetically lost to the City of Milwaukee in 1974 and thereafter of about $1.32 million. However, the projections made for future industrial growth in New Berlin are, at
best, technically based guesstimates that may or may not accurately predict the future course of events.
III. THE EFFECT OF WATER SUPPLY VARIABLES ON INDUSTRIAL LOCATION

A. New Berlin's Groundwater Resources

According to the Southeastern Wisconsin Regional Planning Commission, which has conducted the area's most sophisticated water resources studies, New Berlin and most of Waukesha County are extremely well favored in terms of potential groundwater supplies. To quote from their recent study of the area:

"Problems of inadequate groundwater supply within the Fox River watershed are rare...large yields of excellent quality water, sufficient for municipal and industrial needs, are available throughout the watershed within the deep sandstone aquifer.*

This technical assessment matches the general knowledge that the City of Waukesha's early industrial growth was to some significant extent, encouraged by its famous artesian wells.

But SEWRPC's research has gone beyond the mere physical existence of plentiful groundwater resources and into the economics of utilizing these resources. The following statement succinctly summarizes what are perhaps the two key aspects of New Berlin's current water problem:**

"Nearly all of the larger commercial and industrial self-supplied water users obtain their supply from the sandstone aquifer, due to the high reliability and dependable quality of this supply...The high cost of drilling and operating deep wells is

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** Ibid., p. 253.
probably the major reason for the relatively small pumpage by industrial users. Industries and commercial establishments apparently prefer to purchase water directly from the municipal water utilities, which can provide a more dependable and possibly better quality supply...For these reasons future commercial and industrial water use in the Fox River watershed is expected to continue its heavy reliance on municipal water systems." /italics added/

This latter quote effectively summarizes the relative attractiveness to New Berlin of acquiring the ability to resell filtered City of Milwaukee water to its existing industrial firms and to be able to use this capability as an industrial development marketing tool:

. New Berlin would greatly reduce the financial burden of meeting its own municipal water system development program, requirements; and/or

. Individual firms or industrial park developers would not have to undertake the major expense of drilling, operating and maintaining deep driven wells; and

. New Berlin, and its industrial clients, would be the beneficiaries of what may well be the most dependable urban water system in the United States.

B. Direct Impact of Milwaukee Water Service Availability on New Berlin's Plant Location Environment

It has not been possible for the Department to identify a modern causal relationship between industrial plant location decisions and water service quality differentials on an urban area scale. Industrialists typically screen a number of factors to arrive at their decisions, not least being the nearness of their homes to the site...
selected. The following quote from a recognized industrial development handbook may serve to shed further light on this question:

Water is an indispensible input for all industries. However, this point should not be exaggerated. In fact, the availability of other resources may be more important than water in determining where an industry locates. If there is water in all possible locations, then its influence as a decision-making factor will be very small or non-existent. Water may play an important role in attracting industry only when it is available in some locations and not in others. But, even in such a situation water availability is not guaranteed to bring in industries.

Given this existence of ample groundwater resources in New Berlin, the following generalized statements are perhaps as specific as the Department can be in a report of this nature:

1. City water might open up New Berlin to many industries which are very sensitive to water supply and quality considerations such as chemicals, beverages, food processing, paper products, etc., and which may not otherwise locate there. However, New Berlin has ample resources with which it can supply water for industry if it decides to do so.

2. 24 hour connection to the city's pressurized system would enhance New Berlin's fire prevention system thus reducing the cost of insurance and internal fire security outlays for business - general property tax burdens for fire fighting services may also be reduced.

City water would extend the life of existing wells and probably permit expansion of industrial activity across a broader area of the City of New Berlin. New areas could then be served by wells drilled into water strata currently being tapped by heavy industrial and residential use.

City water would help New Berlin maintain its low property tax differential by permitting that city to reduce the auxiliary service requirements needed to support a self-contained fully integrated water utility operation.

City water would tend to reduce the overall attractiveness of the City of Milwaukee's industrial climate, relatively to New Berlin's, since the uniqueness of the city's water quality and high dependability would no longer be a strong selling point of the city's promotion efforts.

City water would very likely permit New Berlin industry to meet its water consumption needs at a lower overall cost than if that city's water utility was required to meet the growing water needs of its residents and businesses totally from its own resources.

In summary, extension of City of Milwaukee water services to New Berlin would create an even more favorable industrial location climate there than has existed in the past. At the same time, it would reduce the City of Milwaukee's relative uniqueness as that location with the most
comprehensive and dependable system of business services in the metropolitan area. No doubt this combination of factors would lead to some loss of tax base in Milwaukee and some gain in New Berlin. Unfortunately, no techniques are known to the Department that would permit projection or measurement of these comparisons.

C. Relationships Between Water and Sewer Services

In the previous section it was noted that the availability of high quality municipal system water in ample quantities was a favorable, but generally not decisive factor in plant location decisions as long as alternative sources of supply could be developed. Sewer services, on the other hand, are a much more critical factor in a firm's selection of sites. In the Department's attempt to isolate the importance of city water services to New Berlin industry and as a result of the questions raised about the effect of the subcontinental divide in that city, a brief investigation was made of existing sanitary sewer service availability in New Berlin. The results of this survey indicate the following:

1. The New Berlin Industrial Park could not have been laid out and developed without the existing extension of the Metropolitan Sewerage District boundary;

2. All of the area of the New Berlin Industrial Park lies west of the recognized subcontinental divide and in the Fox River Watershed;*

* The term "recognized" is used in reference to SEWRPC's technical definition of the location of the subcontinental divide; see pages 32-39 for more detailed discussion of this important issue.
3. All of the Moorland Industrial Park lies west of the recognized subcontinen
tal divide and in the Fox River Watershed;

4. Phase 3 of the Moorland Industrial Park lies not only beyond the Great Lakes Drainage Basin but outside the existing Metropolitan Sewerage District boundary and hence should not qualify for connection to the Metropolitan MIS system;

5. The sewered area of the two industrial parks in New Berlin is approximately 850 acres;

6. The vast majority of the remaining industrially zoned lands in the City of New Berlin lies west of the subcontinental divide at some distance - a distance that should preclude their possibility of being linked to the Metropolitan Sewerage Districts' facilities.

Other factors that should be considered in this context are these:

1. New Berlin, with full access to the Metropolitan Sewerage Commission's services, does not pay property taxes towards the Commission's construction programs. In 1973 the City of Milwaukee's share of this program amounted to $7,007,724,* which converts to a tax rate on city assessments of $2.61 per $1,000 of assessed value;

* This figure includes construction cost debt services.
2. During the period of New Berlin's most expansive industrial growth, a significant section of the Granville area of the City of Milwaukee, where much of the city's industrial land is located, was clamped under a development moratorium by the State Department of Natural Resources. Reason: insufficient sewer system capacity between Granville and the sewage treatment plants.

3. Although the D.N.R. development moratorium has recently been lifted, it is by no means clear that continued expansion of industrial development in the city's northwest side could not again be stopped cold because of sewer capacity constraints. Current negotiations between the city and Menomonee Falls over that municipality's petition to Milwaukee for a major new sewer connection highlight this continuing problem.

D. Summary of Section III

New Berlin is favored with one of the most ample and high quality groundwater resource bases in the state. However, because these resources require deep drilling for industrial use, either the City of New Berlin or individual firms would have to absorb high costs to expand existing services. Resale of City of Milwaukee water would permit the avoidance of these capital costs and would insure the quality and dependability of supply.
sought by industrial users. Extension of city water service would no doubt act as a further inducement to the expansion of New Berlin's Industrial base. There are no visible indications that New Berlin will have any trouble supplying its residents and its factories with water, for the indefinite future, without help from the City of Milwaukee. Availability of city water services, however, would very likely permit New Berlin to attract many other types of water sensitive industries than would otherwise be possible. Given its ample groundwater resources, New Berlin is fully capable of meeting the needs of its residents and businesses on its own, but at a cost and perhaps at a lower level of dependability. City water service would enhance New Berlin's comparative industrial climate by permitting lower operating costs to industry and perhaps lower property tax rates. The Department has been unable to quantify this comparative advantage but believes it to be a significant consideration.

Although city water services are not considered critical, it is quite clear that New Berlin's industrial parks could not have been laid out and developed without a decision by the Metropolitan Sewerage Commission to extend its district boundaries some distance west of the recognized limits of the sub-continental divide. It was the extension, along with New Berlin's having placed top priority on building its industrial sewer systems before
its residential system, that may well have been the key factor in New Berlin's successful industrial location program. If New Berlin, which does not now pay property taxes towards the Metropolitan Sewerage Commission's Capital Construction Program, were permitted to extend industrial sewers even further beyond the recognized sub-continental divide than it does now, and if the Granville area of Milwaukee continues to be placed under threat of development moratorium by D.N.R. because of inadequate sewer capacity, then it is quite clear to the Department of City Development that Milwaukee's overall competitive industrial development potential would be seriously harmed. As noted briefly in Section IV of this report, the possibility also exists that extension of city water may at some time in the future, pull the City of Milwaukee into the legal questions surrounding diversions of water across the recognized subcontinental divide (either as fresh water from east to west or as raw sewage from west to east).
IV. RELATED ISSUES

In the following section of this report, issues believed to be related to the city's decision to permit New Berlin to buy and resell Milwaukee water rather than develop its own water service system will be discussed in general terms. Several of these questions are readily suitable for more in-depth research analysis by the Department of City Development in a longer time frame than heretofore established; several others are more appropriately researched and reported upon by other city agencies or other outside organizations; and several are perhaps not worth pursuing further at this time.

A. Crossing the Subcontinental Divide

The Department's research indicates that the New Berlin water petition is much more complex than it appears, from the point of view of requiring, under State Law and International Treaty, that the water resources of the Great Lakes drainage basin be retained within that basin. As shown on Map 3, the City of New Berlin is crossed from its North to its South boundaries by a major subcontinental divide. This divide separates the Upper Mississippi Drainage Basin from the Great Lakes - St. Lawrence River Drainage Basin. This means, in effect, that the natural flow of
ground and surface water west of the subcontinental divide is toward the Mississippi River and the Gulf of Mexico while waters east of the Divide naturally flow into Lake Michigan and ultimately into the Atlantic Ocean through the St. Lawrence River.

The Southeastern Wisconsin Regional Planning Commission, in an in-depth study of the legal questions surrounding diversion of water from one drainage basin to another has noted the following:*

One of the more important legal problems encountered in water resources planning concerns interbasin water diversion. The traditional common-law riparian doctrine, which for the most part is still in effect today in Wisconsin, forbade the transfer of water between watersheds. This was regarded as a non-riparian use of water and often gave rise to a per se violation. It must be recognized, however, that states via legislative action can and have created exceptions to this general doctrine... Such diversions are not made, however, without... legal difficulty.

SEWRPC also pointed out that the State of Wisconsin and, therefore, the City of Milwaukee has historically had an interest in upholding this doctrine:**

An important factor militating against inter-watershed stream diversions which in any way affect interstate or international waters, as might well be the case in southeastern Wisconsin, was the long-standing litigation between Wisconsin and Illinois in the Supreme Court of the United States concerning the "Chicago diversion" and developments arising therefrom. A central point in Wisconsin's argument before the court was that inter-watershed diversions,

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** Ibid., p. 69.
especially of the magnitude involved, which reduce or alter the level or flow of waters in one state or country in favor of another state or country are illegal.*

The Department of City Development, having expert capabilities in neither the fields of hydrology nor water law in Wisconsin, is unable to carry the above described arguments further in this type of report. However, because the file before you does not indicate the extent of the geographic service area that New Berlin intends to service with Milwaukee water, the existence of the sub-continental divide very likely does require a formal legal analysis.

From the point of view of economic considerations, on the other hand, a decision to limit service to only the Great Lakes Drainage Basin would probably reduce the expected negative industrial development aspects of selling city water to New Berlin significantly. In this respect, we call particular attention to New Berlin's general land use districts as described on Map 3. It can readily be seen from this map that the overwhelming proportion of

* Although this case has been adjudicated, the question of inter-basin water diversion continues to be an important feature of water use decision-making in Wisconsin. The legal questions related to New Berlin water services could perhaps be resolved by the City Attorney and the Attorney General without a court decision.
New Berlin's light and heavy industrial lands, including its two operational industrial parks, the New Berlin Industrial Park and the Moorland Industrial Park, are located in the Fox River Drainage Basin and, therefore, are not technically appropriate destinations for Great Lakes Drainage Basin waters.

We also call particular attention to the fact that the Metropolitan Sewerage Commission of Milwaukee County has previously established a sewerage district boundary that lies well to the west of the recognized line of the subcontinental divide, thereby facilitating full sewer treatment services to these large scale industrial parks.

Summary

Legal questions of perhaps national or international scope appear to surround the New Berlin water petition. The Department recommends that these legal questions be resolved by the City Attorney before, rather than after, New Berlin's water service contract is agreed to by the City of Milwaukee. Restricting Milwaukee water service to only the Great Lakes Drainage Basin area of New Berlin would probably reduce the expected detrimental development impact of the proposed contract on Milwaukee. For this reason, aside from legal questions, the Department recommends that
any use of city water permitted in New Berlin be controlled to insure that it be restricted to only the Great Lakes basin portion of that municipality.

B. Metropolitan Sewerage Commission Actions

As noted above, the Metropolitan Sewerage Commission of Milwaukee County has already approved a service area boundary in the City of New Berlin which is located on a line which lies significantly west of the recognized subcontinental divide. This is demonstrated on Map 4. It can also be seen from this Map that the divergence of the Metropolitan Sewerage District boundary from the recognized subcontinental divide is even more pronounced in the City and Town of Muskego. At the same time, the district's boundary in Menomonee Falls and the northern half of Brookfield is in all cases very closely aligned with the natural watershed division lines. Again, quoting SEWRPC:

"Of special significance, and also shown on Map 4, are the areas within the Fox River basin in the Cities of Brookfield, Muskego, and New Berlin and the Village of Menomonee Falls which are included in the planned service area of the Metropolitan Sewerage Commission of the County of Milwaukee. Within this service area, which comprises 41.4 square miles, or 4.4 percent, of the total Fox River watershed area, sanitary sewerage will be exported from the basin across the subcontinental divide.

In a report previously cited, SEWRPC more clearly detailed the significant questions raised about the

MAP 4  METROPOLITAN SEWERAGE COMMISSION SERVICE IN WAUKESHA COUNTY

Map 10
PUBLIC, MUNICIPAL SANITARY SEWERAGE SERVICE AREAS
IN THE FOX RIVER WATERSHED
(1964)

LEGEND
☐ EXISTING SANITARY SEWERAGE SERVICE AREA
☐ PROPOSED SANITARY SEWERAGE SERVICE AREA
☐ COUNTY DRAINAGE TO EXISTING TREATMENT FACILITIES
☐ PLANNED SANITARY SEWERAGE SERVICE AREA WITHIN THE FOX RIVER WATERSHED TO BE SERVED BY MILWAUKEE METROPOLITAN SEWERAGE COMMISSION

TREATMENT FACILITIES
◆ EXISTING
▲ PROPOSED

EXISTING AND PROPOSED METRO SERVICE LIMIT
RECOGNIZED LOCATION OF SUB-CONTINENTAL DIVIDE

Only about one-third of the present urban development and two-fifths of the population within the watershed are served by public sanitary sewerage facilities, as compared to almost two-thirds within the Region as a whole. Continued urban sprawl within the watershed will tend to further decrease the proportionate area so served and will intensify water pollution and public health problems within the watershed.

recognition of the subcontinental divide in Waukesha County:

The question posed of delineation of the Root River Watershed boundary is of considerable importance since it involves a diversion, and possible redi-version, of international waters. The westerly boundary of the Root River watershed forms a subcontinental divide, and the waters of Muskego and Little Muskego lakes presently drain into the Fox-Illinois Rivers and thence via the Mississippi River to the Gulf of Mexico.

The problem becomes more immediate and meaningful inasmuch as the Metropolitan Sewerage Commission of the County of Milwaukee is currently undertaking a program of expanding sanitary sewerage facilities premised, in part, on a reassertion of what that agency believes to be the true and historic watershed boundary of the Root River and a reading of Wis. Stats. 59.96(6)(a) and 59.96(9)(c).

Following these statements, SEWRPC presented an account of the historic evidence concerning the definition of the true Root and Fox Rivers watershed boundaries. Their intensively researched conclusion leaves little question as to the accurate location of the subcontinental divide:

The evidence in hand to date seems to indicate overwhelmingly that Little Muskego and Lake Muskego have naturally and historically drained into Wind Lake and thence into the Fox-Illinois, thus excluding these waters and the lands they drain from the Root River Watershed. Subsequent man-made improvements of this natural drainage pattern would not, at the time they were made or now, provide a legal basis for altering the watershed boundary.

In the Department's opinion, the determination of the permanent boundaries of the Metropolitan Sewerage District

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* SEWRPC, Water Law, p. 63.
** Ibid., p. 65.
in Waukesha County has a direct and significant bearing upon the decision to sell City of Milwaukee water to New Berlin. At least the following questions appear to be germane to the question at hand and, in the Department's opinion, should be answered to the Council's satisfaction prior to formal action:

1. Would a successful legal challenge to existing Metropolitan Sewerage District boundaries in New Berlin, on grounds of interbasin water diversion, by extension implicate the City of Milwaukee in the event that city water was also being diverted across interbasin boundaries?

2. Or, in the same sense as No. 1, could the city, having entered into contract with New Berlin for water, be required by the courts to divert an equivalent amount of filtered water westerly across the subcontinental divide as was being diverted easterly, in the form of raw sewage, across the same divide through the Metropolitan Sewerage facilities?

3. Isn't it more probable that the questions now being raised by your committee (and which our research clearly tends to support) concerning the negative economic development impact of selling city water to New Berlin for resale to previously Milwaukee based companies, were more germane to the previous decision which established the Metropolitan District's service boundaries as they exist today,
considering that the recognized subcontinental divide lies in fact east of New Berlin's industrial park developments?

4. Perhaps most significantly, what good purpose is served, from the point of view of City or Milwaukee County taxpayers, for that matter, by making what amounts to an all out effort to provide New Berlin with nominally priced sewer and water services which city taxpayers have previously paid dearly to bring up to top quality status? Is the city and/or the county taxpayer offered a quid pro quo? Have New Berlin and the other Waukesha County suburbs ever expressed any desire to share the financial burdens, now carried by the city and county of Milwaukee, of supporting the urban systems that are as vital to the viability of New Berlin as they are to the City of Milwaukee?

C. Creeping Metropolitanization

In the parlance of the League of Suburban Municipalities, a City of Milwaukee decision to extend large volume water service to the City of New Berlin can aptly be called "Creeping" or "Hidden Metropolitan Government." How often have city officials heard these charges when the suburbs have been asked to participate, in an equitable way, in providing a public service that benefits both city and suburban residents?
Although the Department does not in any way wish to sit in judgment on previous city decisions on suburban water sales or previous Metropolitan Sewerage Commission decisions on the extension of sewer services, it does feel that a piecemeal approach to the metropolitanization of city water services tends to reduce the city's overall bargaining posture, vis-a-vis the suburbs, on other vital issues of major concern and at the same time passes on to suburban residents and businesses the financial benefits of its large scale operations. In short, the Council may wish to give some consideration to the effect of the New Berlin water petition within the larger framework of simultaneously encouraging the metropolitanization of other vital services, particularly those which the city now supports on a disproportionate scale relative to the accrual of benefits among the area's population distributions.

D. New Berlin Housing Policies

In Section III of this report it was pointed out that the City of New Berlin has so far utilized its accessibility to the Metropolitan Sewerage District system primarily to benefit its industrial parks and by implication for the purpose of attracting industry in order to expand its property tax assessments. It can also be amply documented that New Berlin's industrial land use decisions to date have been made in general disregard of the Milwaukee Metropolitan area's optimal balanced land use configuration
as determined by SEWRPC over many years of intensive research and investigation. A point of particular importance, in the Department's opinion, is New Berlin's approach to exclusionary zoning practices in the areas of single and multi-family housing development.

The Common Council of the City of Milwaukee has quite emphatically stated its position on the suburban use of exclusionary zoning practices and the importance which it attaches to a "fair share" distribution of low and moderate income housing throughout the metropolitan area on several occasions.

On September 30, 1969, for example, in File Number 69-1363, the Council approved the following resolved:

BE IT RESOLVED, That the Mayor and the Common Council of the City of Milwaukee do hereby urge the Honorable Warren P. Knowles, Governor of the State of Wisconsin, to initiate whatever legal steps are necessary to deprive local governments of their power to manipulate zoning and building controls which screen out families on the basis of income, social status, and, by implication, race.

Again, on June 30, 1970, the Council reiterated its policy by adopting Resolution Number 70-544, which reads in part:

BE IT RESOLVED, That since in the past decade freeways in Milwaukee have destroyed thousands of dwelling units, diminished the city's housing stock and impaired the city's capability for providing relocation services required for its own priority programs of blight elimination and rehabilitation, which are orientated toward improving housing opportunities for low and moderate income families, such replacement housing should be located on under-developed land throughout the metropolitan area to avoid further jeopardizing the city's ability to proceed with its programs aimed at eliminating blight and relieving overcrowding in substandard neighborhoods.
For many years the argument has been put forward by suburban officials that their extremely high (by Milwaukee standards), minimum zoning standards were merely a reflection of the fact that septic system drainage, in the absence of sanitary sewer service, made these standards unavoidable. And that they are, therefore, not really intended to keep out low or moderate income families even if this happens to happen because of these codes. Although these argument can often be refuted on the basis of simple reference to floor area standards, which in almost all cases accompany high minimum land area requirements, there is a limited degree of logic to the septic system argument against smaller minimum lot standards.

On the other hand, this argument ceases to be tenable when, as is the case in New Berlin, Metropolitan sanitary sewer services are available for the mere asking and are primarily dependent upon the willingness of the suburb in question to expedite sewer system improvements.

Map 3 shows in generalized form New Berlin's existing land use zoning districts. Particular attention is called to the districts labeled R-5 and R-6. Within R-5 districts, only single family homes can be built and must meet the following standards:

- Minimum lot size: 10,000 square feet
- Minimum open area: 4,000 square feet
- Minimum floor area:
  - One story, 3 bedrooms: 1,250 square feet
  - Multi-story, 3 bedrooms: 1,500 square feet
On the basis of estimated 1973 Milwaukee area construction costs, a structure that would meet these minimum requirements would cost approximately $23,250 (1,250 ft. @ $18.60*) to build. Adding the estimated price of the minimum 10,000 square foot lot at a cost of about $7,500, means that a total cost of roughly $30,750, (not counting the added costs of a garage, a well and a septic system or sewer assessment), would be incurred just to meet New Berlin's lowest permissible single family construction requirement. A well and septic system could add as much as $3,000 or more to this figure. From any point of view, this could hardly be considered moderate income housing.

In New Berlin's R-6, or multi-family districts, zoning restrictions limit individual dwelling units in multi-family structures to a maximum of two bedroom units. New Berlin also regulates the height of multi-family structures to 35 feet maximum. In addition, these structures are limited to the following minimum standards for two bedroom units:

<table>
<thead>
<tr>
<th></th>
<th>2-4 D.U.'s</th>
<th>5-10 D.U.'s</th>
<th>11 or more D.U.'s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum lot size</td>
<td>10,000 sq. ft.</td>
<td>same</td>
<td>same</td>
</tr>
<tr>
<td>Minimum open area/D.U.</td>
<td>2,500 sq. ft.</td>
<td>same</td>
<td>same</td>
</tr>
<tr>
<td>Minimum floor area/D.U.</td>
<td>1,000 sq. ft.</td>
<td>same</td>
<td>860 sq. ft.</td>
</tr>
</tbody>
</table>

Here also, although cost estimates have not been calculated, it is quite clear that New Berlin's multi-family

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district zoning standards have been established at levels which effectively preclude moderate income families from residing there.

Overall comparisons between the zoning standards in the City of New Berlin and those that exist in the City of Milwaukee are not always exacting due to the larger number of types of residential districts in the city and the form in which these requirements are described in the city code. However, Milwaukee's F-1 district requirements, the lowest minimum standards for single family structures, are enlightening by comparison to New Berlin's:

| Minimum lot size | 6,000 square feet |
| Minimum open area | 4,000 square feet |
| Minimum floor area: | |
| (no bedroom restrictions) | |
| One story | 900 |
| Multi-story | 1,200 |

The estimated cost of constructing this minimum standard single family one-story home in Milwaukee would amount to approximately $16,740 (900 sq. ft. @ $18.60*). Adding the estimated price of a fully improved lot in the city, $6,600 (6,000 sq. ft. @ $1.10) produces a total estimated cost of roughly $23,340, which, it is important to add, includes the cost of water and sewer services.

Comparing these two minimum single family construction estimates, demonstrates a difference of roughly $10,000 (assuming a well and septic expense of about $2,500 in

* Ibid.
New Berlin) that can be traced almost directly to the two cities. On a shelter expense basis, (excluding property taxes), this difference of $10,000 would mean that the owner of the minimum house in New Berlin would have a mortgage payment of about $81.00 per month higher than he would for the minimum house in the City of Milwaukee at 8½% for a twenty-five year term.

The Department believes that on the basis of the limited evidence presented here (which could easily be expanded in a more detailed study) there is a clear argument that the City of New Berlin is indeed exercising its "Power to manipulate zoning and building controls which screen out families on the basis of income, social status, and, by implication, race."

The Department also believes that this factor raises several possible implications bearing on the New Berlin water petition.

Again, with no attempt to favor its findings with value judgments, the Department offers the following suggestion for the Council's consideration:

Given the importance of the legal issues posed by the existence of the subcontinental divide thru New Berlin and given the fact that a significant proportion of New Berlin's undeveloped R-5 and R-6 districting is located both within the Great Lakes

Drainage Basin and relatively close to the Metropolitan Sewerage Commission's existing interceptor services, the Council could consider striking a bargain with New Berlin which would encourage that municipality to permit some moderate income housing and some low income housing to be built, either by variance or by new districting. In return New Berlin could be assured of receiving an adequate long term supply of filtered city water for distribution within its Great Lakes Drainage Basin territory at reasonable rates. New Berlin now has the opportunity, as a result of previous Metropolitan Sewerage Commission action, to also provide sanitary sewers to these same residential areas on relatively short notice.
APPENDIX A

COST AND ENGINEERING CONSIDERATIONS

The principle of "Economy of Scale" is generally recognized by economists and engineers as being potentially achievable in a variety of large volume production fields. In essence, a particular production process can be described as yielding economies of scale when it is possible to expand output levels, and at the same time, to reduce the average total cost per unit produced. This occurs because the marginal cost of producing the extra units is less than the average unit costs associated with previous output levels, thus pulling the average cost of all units down. Lower average unit costs can then be passed on to benefit previous consumers as well as new users.

Note that this does not mean that the total cost of operating a particular plant is reduced when output is expanded. Note also that while it may be true that economies of scale are achievable in the short run (i.e., that period of time during which output may be expanded without the need to add to fixed plant and equipment) for a particular facility, it does not automatically follow that the marginal cost of producing extra units of output will bring down overall average unit costs if additional long-run fixed investments are required to get this extra output.

There is a growing body of statistical evidence, for example, that may indicate that the electric power industry is no longer in a position of being able to achieve long-run
economies of scale by adding to its generating capacity.* If it is true that the per unit average cost of expanded output is higher than the per unit average cost of processing previous output levels, then all previous consumers will probably be worse off than they would have been without having had new output processed by the system, since the higher marginal costs will bring average unit costs up. This point is critical in a process such as a water utility because while it may be easy to measure declining average unit costs in one part of the system it may be somewhat more difficult to measure expansion effects in another.

A production process such as a water utility can best be seen as a system composed of two distinct components. The intake/filtration plant operations comprise one component. The other component is composed of the operation of the distribution network of mains, pumps, holding tanks, etc., which radiate out from the intake source into the water service areas of the city and its suburbs.

In the absence of relevant cost accounting information,** the Department of City Development can only guess that the two components of the overall system are operating at opposite scales with respect to unit costs. We would expect the intake/filtration process to be experiencing increasing returns and

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** A written request to the Water Department for relevant cost information had not been answered at the time the draft of this report was prepared.
the distribution process to be experiencing decreasing returns. This latter is believed to be occurring because of the rising costs of making public improvements, power utilization and system maintenance and the relatively unambiguous fact that it costs more to transport a given quantity of water from Lake Michigan to County Line Road or 124th Street than to Capitol Drive or 35th Street. In addition, it may be necessary to add non-readily apparent capital improvement to the existing distribution system in order to make additional long distance service possible.

New capital investment may be required either because the existing distribution system is not sufficient to accommodate increased pressure or volume loads or because current excess capacity in the distribution system may be utilized to serve new consumers in the near term while expanded city demands over time may require new additional distribution system expansions in the future. It may be possible, however, to accommodate New Berlin's water requirements thru the use of existing high pressure mains in the city if New Berlin were responsible to construct, at its sole expense, all main connections, reservoirs, pumps, etc., and if all pumping was done during off-peak periods. This approach may eliminate the need to tie their service to the pressurized system during daily high consumption periods and more efficiently utilize the filtration procedures. On the other hand, engineering considerations may make this approach unsuitable.
It may now be apparent that what we are probably dealing with here is a "trade-off" or "balancing act" between probable falling average unit costs for intake and purification processes and probable rising average unit costs for distribution network operations and network expansions. Note that the Department of City Development is not making a value judgment in this respect, but merely stating what it believes to be a realistic model of the overall economics of the system. Testing of this hypothesis involves questions of fact.

On the other hand, the Department does specifically wish to point out that the question at hand is the decision to sell City of Milwaukee water to one of its suburbs, which is located some significant distance from existing intake and purification facilities, and that cost and price relationships must be cast in a different light, from the city's perspective, than a similar extension of water service to, for example, a Land Bank manufacturing firm.

**Summary**

In the absence of hard engineering and cost accounting data on the proposed extension of city water to New Berlin, the Department of City Development is unable to determine the financial feasibility of this project. On strictly theoretical grounds, it appears likely that filtration and intake processes are in a stage of decreasing average unit costs while distribution system economics are probably the reverse. It may be possible, therefore, to benefit city water system users by
passing on reduced average unit costs at the filtration and intake facilities as a result of expanding volume, as long as New Berlin is responsible to cover all additional capital and long distance transportation costs of their service. However, it is entirely possible that long distance transportation operations are much more complex than they first appear to the Department and that an off-peak service arrangement, such as the one described above, is not feasible.

In any event, the Department of City Development recommends to the Common Council that it request a full engineering and accounting assessment of the overall effect of the New Berlin water petition prior to taking action on it. The Department makes this recommendation for the following reasons:

1. Only the Common Council is in a position to judge the relative merits of this petition with respect to evaluating the trade-offs between facilitating further industrial development in New Berlin and perhaps encouraging pecuniary benefits to city residents thru lower water rates;

2. The Council should have quantitative information available to it to judge these trade-offs;

3. The measurable financial aspects of providing New Berlin with water may impact on the Council's consideration of several of the other issues raised in Section IV of this report, particularly with
respect to the legal questions involved in sending city water across the subcontinental divide and moderate and low income housing commitments;

4. The Council should be assured of the fact that the proposed expansion of services to New Berlin will indeed produce dividends to city residents, the true "stockholders" in the city's water system, and that the system is indeed capable to operating under decreasing cost conditions as has been assumed.