



NATURAL RESOURCES DEFENSE COUNCIL

## VIA ELECTRONIC AND FIRST CLASS MAIL

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To Whom It May Concern:

Thank you for the opportunity to comment on the Chicago Metropolitan Agency for Planning's ("CMAP") *GO TO 2040 Comprehensive Regional Plan Draft*. As the Natural Resources Defense Council ("NRDC") has placed a strong programmatic emphasis on fostering the creation of sustainable communities, we very much appreciate CMAP's efforts to set forth a strategic plan that will allow the region to continue to prosper and progress through sustainable initiatives as we move into the future. Our sustainable communities work has focused on fighting sprawl, delivering clean transit choices, moving goods without excess pollution, ensuring environmental justice and creating green jobs; we are glad to see that CMAP has incorporated many of these same priorities into the draft plan. Based on our previous experiences and ongoing efforts in this area, we would like to offer some additional input to ensure that the *GO TO 2040 Comprehensive Regional Plan* fully achieves its potential of making our region a place where people want to live and work, now and in the future, which meets the diverse needs of existing and future residents, and in which the built environment protects and enhances the natural environment and contributes to a high quality of life.

### **Land Use and Transportation**

Overall, NRDC enthusiastically supports *GO TO 2040*'s aim to invest in the development of more compact, walkable, mixed-use communities and its call for local land use decisions to focus on the interrelationship of transportation, land use, and housing with an emphasis on development patterns that support the use of public transit. NRDC has been working for decades to help communities achieve more sustainable development patterns and prevent sprawl.<sup>1</sup> This includes the promotion of more compact densities, development of infill sites and redevelopment of previously developed areas, and expansion and enhancement of public transportation, pedestrian and bicycle facilities.

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<sup>1</sup> NRDC has published a number of books, reports and fact sheets on smart growth which we invite CMAP to reference at <http://www.nrdc.org/smartgrowth/> in creating a comprehensive plan for the region.

We support *GO TO 2040*'s call for transit expansion to be tied to supportive land use planning such as appropriate densities and mixed use zoning. We agree with the plan's focus on access to public transportation as a key feature of a livable and affordable communities. In addition, we would like to underscore the importance of pedestrian and bicycle access amenities and facilities in achieving truly sustainable, livable communities.

As the draft *GO TO 2040* plan cites the need to build affordable communities, we would point CMAP to the Green Communities Initiative,<sup>2</sup> a \$4 billion commitment led by Enterprise Community Partners which NRDC helped to develop in order to build more than 8,500 environmentally friendly, affordable homes across the country.

NRDC has commissioned a number of studies to determine the environmental effects of different land use patterns, including case studies of specific neighborhood types.<sup>3</sup> We would like to call attention to the results, which indicate a full range of environmental benefits provided by smart growth as compared to conventional more sprawling development, including: decreased conversion of agricultural land and natural habitat; reduced surface water runoff with less paved surface per household; and reduced emissions of per capita greenhouse gases and other unhealthy air pollutants through reduced use of single-occupant vehicles.

We agree that there is great potential to increase the efficiency of public transportation through sustainable planning of maintenance, modernization and expansion of the region's interconnected public transportation network. In doing so, the region can realize incredible benefits, including reduced congestion on roadways; lower levels of hazardous air pollution; lower carbon emissions; higher property values; shorter, safer commutes; and lower household transportation costs.

Thus, we would like to emphasize the importance of the entire region adopting the blueprint provided in this plan to guide growth efficiently into city and town centers and transit corridors throughout the region, while protecting open space and farmland. Taking such steps will result in a multitude of economic, quality of life and environmental benefits, and aid the region in reaching the goals set forth in the Chicago Climate Action Plan.

## **Water and Energy Efficiency**

In March 2010, CMAP released *Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan*, which made a series of recommendations regarding water supply planning and management. We appreciate the inclusion of many of those recommendations and findings in the draft *GO TO 2040* plan. There are two areas where we would like to see more specificity: water conservation, especially for those communities that depend on Lake Michigan water, and optimizing water and energy sources.

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<sup>2</sup> See <http://www.greencommunitiesonline.org/> for more information.

<sup>3</sup> See <http://www.nrdc.org/cities/smartGrowth/char/charinx.asp> for more information.

We agree with the recommendations made to improve IDNR’s permitting process for the Lake Michigan Service Area. Overall, we would like to see the current IDNR water conservation conditions of permit fully meet the intention of the language contained in Article 4 of the Great Lakes Water Compact. In addition, we believe the formula IDNR uses to quantify water loss is too permissive, rendering their 8 percent maximum loss requirement and compliance outcomes at least partially misleading. We would recommend eliminating the unavoidable loss factor of 8 percent from the loss equation, enabling IDNR to quantify water loss more realistically.

We would also recommend that the State require volumetric rates and eliminate declining block rates for all Lake Michigan water users unless a utility can demonstrate that its declining block rate accurately reflects declining real costs of service.

In 2004, NRDC released a report focused on three California cities and the connection between water and the energy needed to pump and distribute it. The report, *Energy Down the Drain*,<sup>4</sup> included an energy-water calculator, developed by the Pacific Institute, that has provided an invaluable tool for state and local governments to fully understand the connection between energy and water, enabling them to make a series of policy and programmatic changes to reduce operating costs and improve overall service. We would welcome the opportunity to work with CMAP and selected local governments and utilities to adapt that calculator for the northeastern Illinois region. We believe such a tool could prove as invaluable for this region as it has for the western part of the United States.

Finally, we fully support the integration of land use policies with site planning and water resources. We would like to see the same integration between energy efficiency retrofit and water efficiency retrofits. As CMAP continues to work with its partners to implement the Chicago Region Retrofit Ramp-Up program, special attention should be paid to integrating energy efficiency upgrades with water efficiency opportunities.

### **Green Infrastructure Opportunities Related to Stormwater and Wastewater**

We agree with the draft *GO TO 2040* plan’s conclusion that prudent investments into green infrastructure solutions can greatly benefit the region. As stated throughout the plan, flooding remains a major recurring problem in the region, a sign of the aging and ineffective stormwater management system. As storm events are likely to increase in magnitude and frequency with climate change in the coming years, flooding will become an even greater impediment to achieving livable communities.

MWRD’s Tunnel and Reservoir Program (“TARP”) has a goal of reducing the release of untreated wastewater to people’s basements, local streams and Lake Michigan. We believe this ongoing project should be completed in a timely fashion. However, no built stormwater and wastewater system, even one as deep and comprehensive as TARP,

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4 See <http://www.nrdc.org/water/pollution/rooftops/rooftops.pdf> for more information.

can fully protect a region from the extremes in precipitation we are likely to see as a result of climate change and population growth.<sup>5</sup>

As a region, we need to look to green infrastructure as a mechanism for reducing the loads on our aging sewage and stormwater infrastructure. By filtering stormwater and returning water to its natural system, green infrastructure can abate CSO events, improve water quality, save energy, and promote more aesthetically pleasing neighborhoods. Moreover, green infrastructure provides an array of economic benefits, from increasing property values and creating green jobs to reducing pollution (thus lowering associated public health costs) and easing soaring temperatures (thus lowering utility expenses).<sup>6</sup>

The draft *GO TO 2040* plan does not fully articulate these benefits of green infrastructure. In addition, the draft plan does not mention that green infrastructure can also reduce maintenance on hard infrastructure and prolong its useful life. The section on sustainable, local food production does note that sustainable farming in this urban area can provide environmental benefits; however, it does not emphasize the opportunity for urban farming that green infrastructure solutions can provide.

We would strongly encourage CMAP to continue to advocate for the use of green infrastructure by state and local governments and create tools, such as model ordinances, to enable them to do so. We would also encourage CMAP to address permitting and maintenance operations that must be reconciled for local governments to be fully supportive of green infrastructure strategies. We would refer officials and engineers to NRDC's 2007 *Rooftops to Rivers* report,<sup>7</sup> which surveys opportunities for federal, state, and local governments to implement green infrastructure solutions. Progress in moving federal policy through the U.S. EPA, and in establishing green infrastructure pilots on state and local levels has occurred since the report was issued, such as the adoption of the "Rooftop to Rivers Initiative" by the city of Aurora, Illinois on the Fox River.

During the past three years, NRDC has assisted Aurora in identifying and implementing green infrastructure and other water resource protection strategies. Aurora's "Rooftop to Rivers Initiative" is now fully underway. The city has already implemented a number of green infrastructure measures, which have already resulted in both cost savings and environmental benefits, and it has plans to implement additional programs and projects as it identifies the funds to do so.

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<sup>5</sup> Research conducted by the University of Illinois and Texas Tech University for the Chicago Climate Action Plan suggests that [precipitation could increase by as much as 20 percent by the end of the century](#). The same research shows that the frequency of extreme storm events, in which more than 2.5 inches of rain fall within a 24-hour period of time, could increase 50 percent by 2039 and 80-160 percent by the end of the century. Chicago Climate Action Plan. "Climate Change and Changes in Precipitation." [http://www.chicagoclimataction.org/filebin/pdf/factsheets/Chicago\\_Precipitation\\_Fact\\_Sheet\\_June\\_2008.pdf](http://www.chicagoclimataction.org/filebin/pdf/factsheets/Chicago_Precipitation_Fact_Sheet_June_2008.pdf).

<sup>6</sup> Dunn, A.D., "Siting Green Infrastructure: Legal and Policy Solutions to Alleviate Urban Poverty and Promote Healthy Communities," *Boston College Environmental Affairs Law Review* 37: 2010; Benedict, M. and McMahon, E., "Green Infrastructure: Linking Landscapes and Communities," Washington, DC: Island Press, 2006; Natural Resources Defense Council. "Rooftops to Rivers." See Chapter 3: Controlling Stormwater in Urban Environments and Chapter 4: Economic Benefits of Green Solutions, <http://www.nrdc.org/water/pollution/rooftops/rooftops.pdf>.

<sup>7</sup> See <http://www.nrdc.org/water/pollution/rooftops/rooftops.pdf> for more information.

NRDC is also working with the engineering firm Shaw Environmental to develop a “green infrastructure calculator” for the Milwaukee Metropolitan Sanitary District (“MMSD”) that will allow local communities to determine what benefits can be achieved through implementation of different green infrastructure measures. Here are some examples of the results we have found using the calculator:

1. A 100 square foot green roof can reduce water runoff by 30 percent and remove more than 17 pounds of pollutants (total suspended solids, phosphorous and nitrogen) over its lifecycle (20 years in this case).
2. Porous pavement installed on 1/3 of a city block can reduce runoff by 50 percent and remove more than 10,000 pounds of pollutants over its useful life (again, 20 years).
3. A 55 gallon rain barrel or cistern can reduce runoff by 35% and remove almost 17 pounds of pollutants over its lifecycle.

NRDC continues to work with MMSD to refine the green infrastructure calculator’s modeling of the interaction between green infrastructure and traditional “gray” infrastructure.

Here in Chicago, working with the City of Chicago and Shaw Environmental, NRDC is modeling the potential impacts of green infrastructure in a sample Chicago neighborhood. The study area has approximately 1,880,000 million square feet of impervious area from a mixture of single-family homes as well as a number of multi-family and commercial areas. We considered green infrastructure solutions including rain barrels associated hanging gardens, street trees, urban bioswales, and conversion of alleys and parking lanes to porous pavement. From this modeling exercise, we concluded that installing street trees, bioswales, raingardens and porous pavement on 50 percent of the available area within the study area would result in:

- 1) a 30 percent reduction in the volume of water entering the sewer system, reducing the number of CSOs and corresponding pollutants discharged to the river by 30 percent, and
- 2) a 30 percent reduction in pollutants entering the sewer system, potentially reducing treatment needs further in the system.

Thus, we believe the benefits of green infrastructure are clear and will greatly contribute to increasing our region’s water management and subsequent livability. CMAP could play an invaluable role by critiquing these models and publicizing the results. We would welcome CMAP's greater participation in our work, especially on the economic modeling components.

While the draft *GO TO 2040* plan does note the importance of conserving water resources, the problems with current storm and wastewater infrastructure in the region and the responsibility of municipalities to address such failings, the plan does not specifically point to the agencies and steps needing to be taken to ensure sustainable communities in 2040.

### **Disinfection Would Assist Conservation and Improve Parks and Open Space**

According to the Metropolitan Water Reclamation District (MWRD), more than 70 percent of the annual flow in the CAWS is from the discharge of treated municipal wastewater effluent from the Calumet, Lemont, North Side, and Stickney Water Reclamation plants (the four MWRD treatment facilities along the CAWS). In the winter months, virtually 100 percent of the flow is from these facilities; in the summer, it is approximately 50 percent.<sup>8</sup> Large (interceptor) sewers gather wastewater from local sewers within the MWRD boundaries and convey it to the treatment plants, where water diverted from Lake Michigan is used to dilute and treat the sewage. However, while MWRD treats its sewage, it still does not disinfect it to eliminate all of the harmful viruses and bacteria associated with human waste before discharging the wastewater into the CAWS. Disinfection is common practice almost everywhere else in the country. Dr. Peter Orris, Professor and Chief of Occupational Medicine at the University of Illinois at Chicago and respected epidemiologist, summarized it well in recent Illinois Pollution Control Board hearings on the subject: “It has long been established that waterborne pathogens associated with sewage are hazardous to public health. Perhaps no other area of medicine has been as well established for as long.”<sup>9</sup> The Illinois Environmental Protection Agency (IEPA) recommended disinfection after conducting a five-year study to review existing and potential uses of the river. In 2005, the City of Chicago also endorsed disinfection. A study commissioned by the U.S. Environmental Protection Agency (USEPA) concluded that using ultraviolet light, a widespread disinfection technology, would cost each household in the region \$1.94 per month.<sup>10</sup>

Disinfection of effluent from wastewater treatment plants in the region is imperative to achieving sustainable, healthful communities. Our water should be safe for swimming, fishing, recreating, etc., and disinfection is a proven technique to remove harmful viruses and bacteria that currently keep much of the CAWS from being safe for recreating. Many of the region’s wastewater treatment plant treatment trains already include disinfection; MWRD needs to install such technology. Disinfection can also have broader benefits, including new homes and businesses along the waterways and increased property values.

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8 Rick Mattoon, “Assessing the Midwest Floods of 2008 (and 1993),” Federal Reserve Bank of Chicago, blog post, July 10, 2008, [http://midwest.chicagofedblogs.org/archives/2008/07/mattoon\\_flood\\_b.html](http://midwest.chicagofedblogs.org/archives/2008/07/mattoon_flood_b.html)

9 Peter Orris, “Testimony of Peter Orris, M.D., M.P.H.,” Before the Illinois Pollution Control Board, Filed on August 4, 2008, 1.

10 Science International Applications Corporation, “Review of Technical Memorandum 1WQ-Disinfection Evaluation Prepared on Behalf of the Metropolitan Water Reclamation District of Greater Chicago,” Final Report, October 26, 2006, 15.

## Preventing Invasive Species: Opportunity for Infrastructure Improvements

The draft *GO TO 2040* plan mentions that the connection between the Great Lakes and Mississippi River basins has caused concerns about invasive species like the Asian carp entering the Great Lakes. Federal and state officials acknowledge that the migration of bighead and silver Asian carp from the Illinois and Des Plaines Rivers is “the most recent and likely most acute AIS [aquatic invasive species] threat facing the Great Lakes today.”<sup>11</sup> Since November 2009, a still-growing body of environmental DNA evidence<sup>12</sup>, indicates that invasive Asian carp have breached electric barriers in the Chicago Area Waterway System (CAWS)<sup>13</sup> that are intended to prevent the big, hungry fish from colonizing Lake Michigan. Indeed, in late June, the first Asian carp was caught in Lake Calumet, six miles from Lake Michigan, beyond all barriers between the river and Lake Michigan, including the electric barrier that was supposed to provide the final defense against the carp.<sup>14</sup>

If Asian carp are allowed to establish themselves in the Great Lakes, it could have a devastating impact on Great Lakes fisheries and irrevocably change the ecosystem of the lakes and rivers throughout the watershed. Asian carp are voracious filter feeders that primarily consume plankton at the base of the food chain – up to 40% of their body weight each day. Asian carp also breed multiple times each year, giving them a well-documented ability to out-compete native fish species and take over ecosystems. Asian carp filter feeding could accelerate ecosystem changes already initiated by the invasive zebra and quagga mussels. Once established, eradicating them is nearly impossible.

The draft *GO TO 2040* plan states that threat of invasive species transfers through the CAWS should be “addressed in such a way as to preserve and expand our opportunities in waterway shipping.” We wholeheartedly agree and believe that the only permanent, effective long-term solution to invasive species transfers through the CAWS is to separate the Great Lakes and Mississippi River watersheds through re-establishment of the natural divide that was pierced when the CAWS was constructed. Permanently separating these two watersheds does not mean arbitrarily closing Chicago’s locks or

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11 Asian Carp Workgroup, “Draft Asian Carp Control Strategy Framework,” February, 2010, 1.

12 The University of Notre Dame developed eDNA testing to improve monitoring for invasive species. Fish DNA is released into the water in several ways, including the shedding of mucous, feces and urine. eDNA testing takes water samples and filters it for fragments of DNA, which can be left suspended in water for days. While eDNA technology is considered cutting edge and has yet to be published in a peer-reviewed journal, federal agencies, including the USEPA and the ACOE, consider it “sufficiently reliable and robust in reporting a pattern of detection that should be considered actionable in a management context.” See U.S. Army Corps of Engineers, Chicago District. “Environmental DNA results as of June 11, 2010. [http://www.lrc.usace.army.mil/pao/11June2010\\_eDNA\\_update.pdf](http://www.lrc.usace.army.mil/pao/11June2010_eDNA_update.pdf).

13 According to the Illinois Environmental Protection Agency, “the Chicago Area Waterways System, or CAWS, consists of 78 miles of canals and modified streams located within Cook and surrounding counties. The CAWS consists of the Chicago River, its two main branches (North Branch and South Branch), as well as the Cal-Sag Channel, the Chicago Sanitary and Ship Canal, and the tributaries in an area extending from the metropolitan Chicago area to the Lockport vicinity. It also includes Lake Calumet.” See “Chicago-Area-Waterways,” <http://www.epa.state.il.us/mailman/listinfo/chicago-area-waterways>.

14 “Carp creeps into Lake Calumet,” Joel Hood, Chicago Tribune, June 23, 2010, <http://www.chicagotribune.com/news/local/ct-met-0624-asian-carp-found-20100623,0,3511274.story>



canal system. If thoughtfully planned and implemented, separation could be accomplished through the strategic construction of barriers in the CAWS to minimize the disruption to existing navigation flows while eliminating any movement of water (and the invasive species that come with it) between the two ecosystems. Economic impacts on water-based commerce would be further mitigated through the use of inter-modal facilities and other means. In this way, the need to deal with the continued, unacceptable risk of invasive species moving through the CAWS could serve as a catalyst to rethink our water and transportation infrastructure, stimulating investments that could benefit the Chicago region economically and making our region more sustainable.

Permanent separation could also enable Chicago and the entire region to rethink its outdated systems for moving goods and managing wastewater and stormwater, in addition to preventing the spread of the voracious, habitat-altering Asian carp, and all of the other invasive species that are poised to continue using the CAWS as a highway, in both directions. The silver and bighead carp are simply the latest invasive species threatening to move between the Mississippi River and the Great Lakes – others are queued up to follow, further exacerbating a problem that stresses our ecosystems and costs the American economy billions of dollars every year.<sup>15</sup> A number of species, including the spiny water flea, water chestnut, New Zealand mud snails, bloody red shrimp, hydrilla, northern snakehead and viral and bacterial diseases are poised to enter the Great Lakes via the CAWS. Until the underlying cause of invasive species movement between the Great Lakes and the Mississippi River is addressed, future invasions are inevitable, regardless the outcome of the current Asian carp crisis.

### **Regional Mobility: Create a More Efficient Freight Network**

The draft *GO TO 2040* plan appropriately notes the need for Chicago to rationalize its transportation system to provide for more efficient goods movement, and also (as noted above) the potential need to rethink the way the CAWS functions to prevent the continued spread of invasive species between the Great Lakes and Mississippi River. We urge CMAP to take this analysis further and begin to think about the way in which the CAWS could be re-designed to both more efficiently and effectively link waterborne commerce moving through the CAWS with other modes of good movements, and to account for a potential separation of the Great Lakes and Mississippi River watersheds.

The draft *GO TO 2040* plan notes that currently less than three percent of the region's freight is moved on the water. In 2009, CMAP commissioned Cambridge Systematics to fully analyze freight movement in the region. The study concluded that compared to neighboring regions, the Chicago region has suffered a considerable decline in freight tonnage on waterways, suggesting this decline may be the result of a lower

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<sup>15</sup> David Pimentel, Rodolfo Zuniga and Doug Morrison, "Update on the Environmental and Economic Costs Associated with Alien-Invasive Species in the United States," *Ecological Economics* 52 (2005): 273.



level of service like lock delays or navigable depth. Stakeholders engaged in the process cited the lack of connectivity between the locks and rail lines.<sup>16</sup>

Dr. John C. Taylor, Associate Professor of Supply Chain Management and Director of Supply Chain Programs in the Department of Marketing and Supply Chain Management at Wayne State University, studied the CAWS on behalf of the State of Michigan. Taylor calculates that if physical barriers were established at the locks connecting the CAWS to Lake Michigan to prevent the Asian carp migration, the additional annual transportation cost would be between \$64 and \$69 million.<sup>17</sup> A separate study by Dr. Joseph Schwieterman of DePaul University, which was prepared for the Illinois Chamber of Commerce, came to a comparable estimate of \$89 million when looking at the same issue.<sup>18</sup> To keep out an invasive species that could decimate multi-billion dollar fishing and tourism industries and 40 million people's drinking water, increased transportation costs along these lines are perhaps tolerable.

However, using the lock closure as the barrier without constructing any additional infrastructure is not the most strategic way to separate the Great Lakes from the Mississippi River in terms of the transportation industry. These costs could be significantly reduced, and perhaps entirely offset, by strategically locating permanent barriers and intermodal facilities to efficiently connect with the rail and trucking industries. We believe that by linking with the CREATE rail program and other similar projects, a permanent separation coupled with new intermodal facilities can make the CREATE rail program more effective – and benefit the Chicago region's economically – by connecting it with waterway and truck shipping operations and increasing the overall efficiency of freight operations in the region. With these intermodal facilities providing the much needed link between all shipping pathways in the region, the CAWS, which is currently underutilized for the reasons noted above, will provide a more productive and viable mode of moving goods through the region. Thus, such measures have the potential to reduce problematic rail and truck congestion. We would like to see CMAP further

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<sup>16</sup> Cambridge Systematics, "Regional Freight System Planning Recommendations," Draft Tech Memo, prepared for the Chicago Metropolitan Agency for Planning, February 3, 2010. Cambridge Systematic's findings and recommendations are available in draft form on CMAP's web site, <http://cmap.illinois.gov/cmp/freightsystem.aspx>.

<sup>17</sup> Affidavit of John C. Taylor, United States District Court: Northern District of Illinois. Case 1:10-cv-04457. State of Michigan, State of Wisconsin, State of Minnesota, State of Ohio, and Commonwealth of Pennsylvania v. United States Army Corps of Engineers and Metropolitan Water Reclamation District of Greater Chicago. Document 12, filed 19 July 2010 [hereinafter "Taylor Affidavit"].

<sup>18</sup> Illinois Chamber of Commerce. "Closure of Chicago & O'Brien Locks Would Cost \$4.7 Billion Over 20 Years According to Report Released by Illinois Chamber of Commerce." <http://www.prnewswire.com/news-releases/closure-of-chicago--obrien-locks-would-cost-47-billion-over-20-years-according-to-report-released-by-illinois-chamber-of-commerce-90092277.html>. Dr. Schwieterman concludes that the overall impact of an arbitrary, unplanned closure of Chicago's locks would be \$4.7 billion over 20 years. This figure is inflated, however, because it assumes that a closure of the locks would occur in an arbitrary, unplanned way, a step that no one – not even the State of Michigan – is currently proposing. As a result, the Schweierman report assumes, for example, that the city would be required to invest in new infrastructure for flood prevention as well as emergency response. Both of these are red herrings. See Taylor Affidavit. On the issues for which their analyses overlap, the Taylor and Schweierman reports engage in similar analyses and reach similar conclusions. See Taylor Affidavit.

investigate the impacts on the transportation industry of a permanent separation and the ways in which these impacts can be minimized, including the suggested measures above.

In addition, we want to underscore the importance of greater investment, on federal, state and local levels, into providing better connections to existing intermodal facilities as well as constructing new intermodal facilities. These new intermodal facilities should be located strategically to minimize negatives associated with freight facilities (including special attention to environment justice concerns) in addition to accommodating a permanent separation of the Mississippi River and Lake Michigan in the Chicago region. In order to most appropriately locate such facilities, we strongly support the draft *GO TO 2040* plan's call for increased transparency to private sector transportation data in order to make the most informed decisions possible when considering improvements to the region's aging transportation infrastructure. We see a great opportunity for CMAP to investigate the transportation opportunities surrounding a permanent separation of the Great Lakes and Mississippi River basin and believe such investigations should be integrated into the *GO TO 2040* Plan and the upcoming Transportation Improvement Plan for 2010-2015.

## **Conclusion**

Our region is facing a host of challenges including: the need to address urban sprawl, the continuing threat of invasive species to our the multi-billion dollar fishing and tourism industries of the Great Lakes, as well as our drinking water supply; the inadequacy of our aging wastewater and stormwater infrastructure in handling the extreme precipitation events caused by climate change and in protecting water quality; and the urgent need to upgrade and expand our transportation infrastructure. However, each of these challenges is also an opportunity to rethink our development, transportation and wastewater networks in order to improve quality of life in our communities and the way we live with our natural environment.

Investment in smart growth strategies and a permanent separation of the Great Lakes and Mississippi River basins, in conjunction with an investment in cleaner and more efficient intermodal facilities, green infrastructure, and more progressive storm and wastewater treatment has the potential to benefit the region enormously, in terms of the environment, the economy and public health. Our national interest will also be served by making these investments by protecting a multi-billion dollar fishing and tourism economy, enhancing the freight hub that over a third of the nation's freight travels through and setting an example for other cities needing to update their storm and wastewater management systems.

We fully support the plan's regional vision to direct growth to existing developed areas and ensure that strategic plans and investments are coordinated to produce an actual realization of progress in the region. We also urge CMAP, other involved agencies, and stakeholders to consider the importance of establishing a permanent separation between the Great Lakes and Mississippi River to prevent the economic and ecological toll caused

by the spread of invasive species, while at the same time investing in new infrastructure that would benefit the Chicago region.

Thank you for the opportunity to comment. Please contact any of the undersigned if you have questions or would like to discuss any of these issues further.

Sincerely,

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