



## Summary: Socio-Economic Impact Analysis of the Preliminary Draft of the Regional Water Supply Plan by Southeastern Wisconsin Regional Planning Commission

Presented to SEWRPCs Environmental Justice Task Force

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# SocioEconomic Impact Analysis: Framework

## Framework for the Socio-Economic Impact Analysis

- What impact would implementation of the regional water supply recommendations have on the overall distribution of population, including racial segregation patterns, in the Region?
- What impact would implementation of the regional water supply recommendations have on the overall distribution of job locations in the Region?
- What impact would implementation of the regional water supply recommendations have on the fiscal health and well-being of those communities in the Region wherein reside relatively large populations of low and moderate income families?
- What impact would implementation of the regional water supply recommendations have on housing and other land use patterns in the Region?
- To what extent would implementation of the regional water supply recommendations contribute to any failure of the plan to meet Federal regulations attendant to civil rights and environmental justice?

## Chapter 6: Public Participation and Environmental Justice

### Chapter 6

- Outlines the public participation strategy and results undertaken by CED and Prism related to the socio-economic impact analysis
- Provides background information on:
  - Federal laws and regulations pertaining to environmental justice
  - SEWRPC's EJTF and role of the RWSP technical advisory committee
- Provides an evaluation of SEWRPC's public outreach for the RWSP

## Chapter 6: Public Participation and Environmental Justice

- CED/Prism strategy for public outreach
  - 2 rounds of focus groups to gain specified feedback and incorporate findings into the SEI analysis (including SWOT)
  - Open Houses
- Key Findings from the First Round of Focus Groups
  - *Potential Impact of Plan Recommendations on Development*  
*Does water source (lake vs. groundwater) affect development?*
  - Water is important (necessary component) but more important than actual source is the infrastructure; and even more important than water infrastructure is sewer and road infrastructure (significantly more costly)
  - For developers/builders, the presence of water and access to water utility infrastructure is important, but the source of municipal water (Lake vs groundwater) did not matter.
  - Planners and utility managers pointed out their objectives are to keep costs low for each of its existing utility customers (helps to drive “compact, urban design”) and to keep citizens safe (role that municipal water supply plays in fire suppression)

## Chapter 6: Public Participation and Environmental Justice

- Key Findings from the Second Round of Focus Groups
  - *Identifying Potential Socio-Economic Impacts based on Plan Recommendations (SWOT Analysis and Focus Group Discussions)*
  - Identification of 8 Cluster Areas of Concerns and Questions
    - Job Growth and Migration
    - Racial Segregation
    - Financial Impacts on Low-Income Households
    - Urban Sprawl and Controlling Development
- AND
  - Great Lakes Compact and Diversion Issues
  - Regional Cooperation
  - Return Flow Issues
  - Groundwater Infiltration and Quantity Issues

## Chapter 6: Public Participation and Environmental Justice

### Evaluation of RWSP recommendations

- **Source of Water Supply**

- *Utilities to Remain on Current Supply*

- Continued use of supply sources is sustainable through the planning year 2035 and there would be little to no adverse environmental or human health effects or impacts to the communities evaluated

- *Utilities to Switch Source of Supply*

- If carried out in environmentally sensitive ways, this should improve environmental quality for all populations
- The delineation of future water service areas support compact urban design.

- *Proposed Potential Future Utilities*

- Development of a new municipal water utility would be based on a demonstrated local need and initiative; would also trigger an environmental analysis.

## Chapter 6: Public Participation and Environmental Justice

### Evaluation of RWSP recommendations

- **Water Conservation Programming**
  - Designed to improve the use of supply and maintain the sustainability of sources of water supply for all water consumers - no disproportionate environmental or fiscal impact on any segment of the population and therefore it is unlikely this recommendation would have any environmental justice impacts
- **Recharge Area Protection**
  - Such areas are typically undevelopable or lands within the delineated environmental corridors that SEWRPC recommends not be developed therefore it is unlikely that this recommendation would have any environmental justice impacts
- **Stormwater Management Practices**
  - Contribute to a sustainable groundwater supply therefore unlikely to have an adverse impact on the environment or have any environmental justice impacts.

## Chapter 6: Public Participation and Environmental Justice

### Evaluation of RWSP recommendations

- **High Capacity Well Siting Procedures**

- Procedures are recommended to safeguard the quantity and quality of the groundwater supply, and to ensure that groundwater extraction will not have a negative impact on nearby surface waters through baseflow depletion. Based on this, it is unlikely that high capacity well siting procedures would have any adverse impact on the environment or that it would have any environmental justice impacts.

- **Enhanced Rainfall Infiltration Systems**

- The determination to use is site specific, based on local conditions and needs. Based on this, it is unlikely that the installation of enhanced rainfall infiltration systems would have an adverse impact on the environment or that it would have any environmental injustice impacts.
- Systems can be designed to have positive environmental impacts and typically would be located on open space lands.

## Chapter 6: Public Participation and Environmental Justice

### Evaluation of SEWRPCs Public Outreach for the RWSP

- The Office of Environmental Justice *Toolkit* provides guidance to evaluate whether or not any relevant person or group has been denied an opportunity for meaningful involvement in governmental decision-making relating to the distribution of environmental benefits or burdens. It is applicable specifically to localized plans that would trigger an EIS rather than to regional long-range planning efforts which entail different levels of planning and planning participation.
- Uncertainties over an appropriate level of involvement and plan contribution specific to the RWSP prevail. Is it adequate that environmental justice communities were contacted by SEWRPC in the context of providing information on the plan and plan development? Did SEWRPC violate Title VI by not recruiting a representative from the environmental justice communities to the RWSP Technical Committee?

## Chapter 6: Public Participation and Environmental Justice

### Evaluation of SEWRPCs Public Outreach for the RWSP

- Principle 7 states *“Environmental justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation.”*
- While SEWRPC conducted considerable public outreach during the course of the RWSP planning process, including efforts to engage environmental justice groups, its failure to include a representative from environmental justice communities on the RWSP Technical Committee violates the spirit, if not the letter, of environmental justice.
  - Weakens the plan as it denies an opportunity for SEWRPC to engage with environmental justice communities in order to gain support for plan recommendations.

## Chapter 6: Public Participation and Environmental Justice

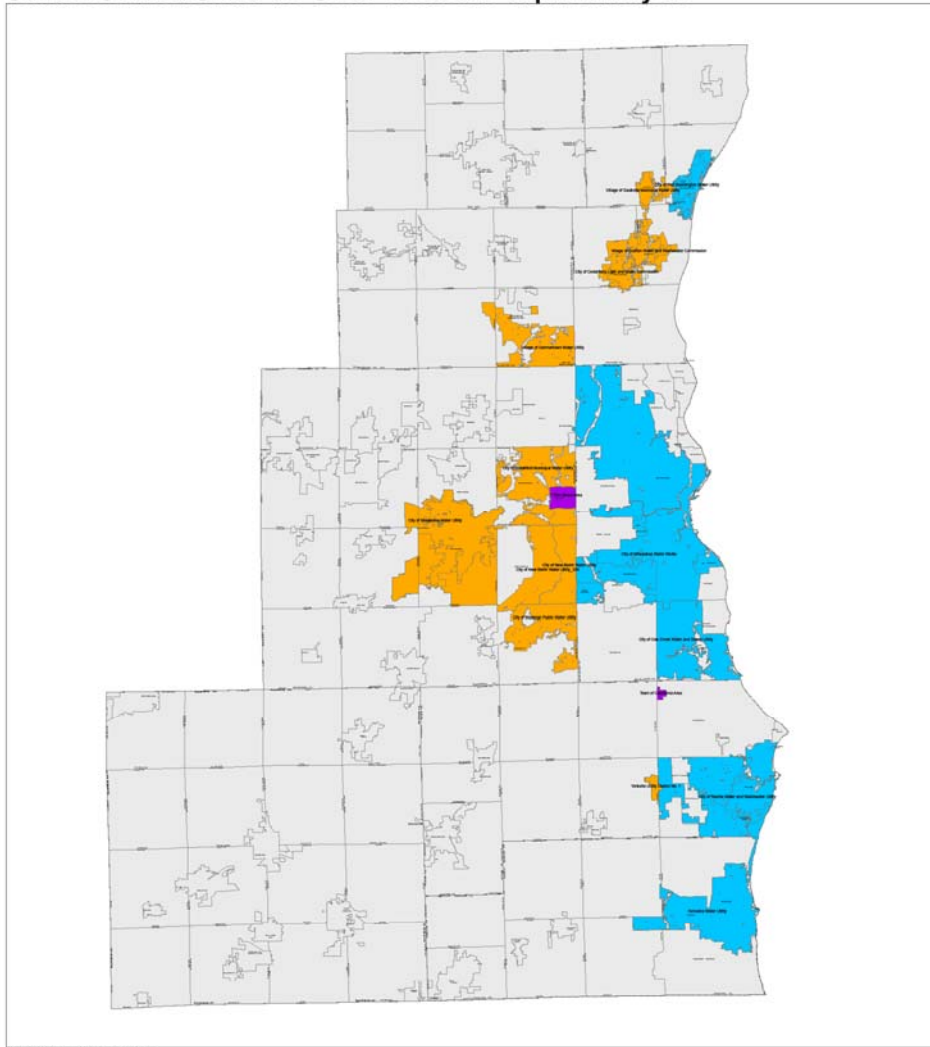
### Evaluation of SEWRPCs Public Outreach for the RWSP

- Recommendations for future updates to the RWSP:
  - SEWRPC and the EJTF should establish a process for selecting one or more representatives from either the EJTF or the Environmental Justice community to the RWSP Technical Committee
  - SEWRPC should develop a formalized public participation plan that outlines the specific strategies that are used for public engagement
    - Comprehensive Plans and Regional Transportation Plan as examples

# SocioEconomic Impact Analysis: Summary

- Review of the Six Recommendations from the RWSP
  - Sources of Water Supply (Lake Michigan vs. groundwater supply)
    - 27 existing utilities to remain on Lake Michigan supply
    - 42 existing utilities to remain on groundwater supply
    - 9 existing utilities to be converted from groundwater to L. Mich supply
    - 21 new utilities to utilize groundwater supply
    - 2 new utilities to be created using Lake Michigan supply
  - Water Conservation Program
  - Recharge Area Protection
  - Stormwater Management Practices
  - High Capacity Well Regulation
  - Enhanced Rainfall Infiltration Systems

## Utilities Studied Under the Socio-Economic Impact Analysis



Source: SEWRPC and CED

-  Potential Lake Michigan Surface Water Provider Utilities
-  Existing Utilities to Be Converted from Groundwater to Lake Michigan Surface Water as Source of Water Supply
-  New Utilities to be Created Using Lake Michigan Surface Water as Source of Supply

## FOCUS OF STUDY

- 5 existing Lake Michigan utilities that could be providers of L. Michigan to those utilities
  - Kenosha, Milwaukee, Oak Creek, Port Washington, Racine (providing)
- 9 existing utilities to be converted from groundwater to L. Mich supply
  - Brookfield, Cedarburg, Germantown, Grafton, Muskego, New Berlin, Saukville, Waukesha, Yorkville Utility District 1 (purchasing)
- 2 new utilities to be created using Lake Michigan supply
  - Elm Grove, Northwest Caledonia area (purchasing)

# SocioEconomic Impact Analysis: Summary

## Evaluating the Six Recommendations in the context of a SEI analysis

- Evaluation was based on:
  - Historic trends and future socio-economic indicators and projections (Chapters 2, 3, and 4)
  - CED's land use evaluation (Chapter 5)
  - Scientific evidence during the Regional Water Supply Planning programs
  - Input from two series of focus groups and public feedback and comments
- And within the context of:
  - Public Service Commission, USEPA, and Wisconsin Department of Natural Resources regulations
  - Guidelines set forth in the Great Lakes Compact and Act 227 of the WI State Code
  - Wisconsin state laws regulating planning at both the local, utility, and regional levels
    - Most planning decisions are made and enforced at the local level
      - Role of Smart Growth Planning
    - Regional Planning (SEWRPC) is advisory rather than regulatory

# SocioEconomic Impact Analysis: Summary

## Evaluation: Does water source (Lake Michigan vs. groundwater) affect development?

- First round of Focus Groups (planners, developers, utility managers)
  - *Planners and utility managers participating in focus groups for this study did not view the source of supply as a potential constraint on development. Rather than the source of supply, they claimed that it is the costs associated with providing water and other infrastructure that generally has an impact on the development process.*
  - *Additionally, the developers participating in focus groups expressed the view that the source of water would not have an impact on development, whether lake water or groundwater, and that the critical element was municipally-provided water and the ease with which the developer can tap into the existing infrastructure.*

# SocioEconomic Impact Analysis: Summary

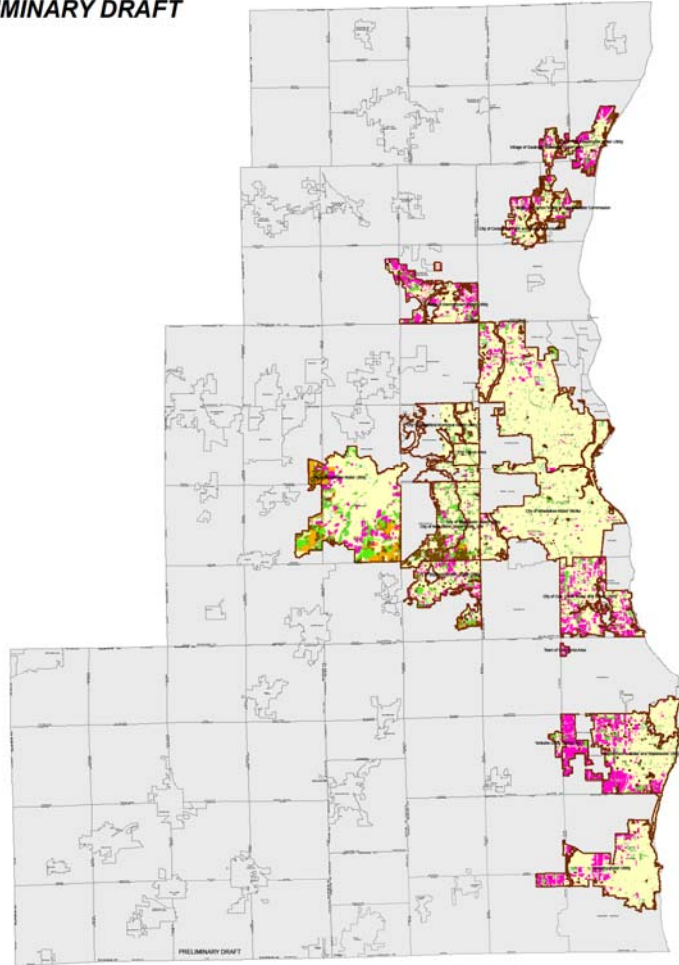
## Evaluation: Does water source (Lake Michigan vs. groundwater) affect development?

- CED's Land Use Analysis: Key Findings

- *Based on the land use findings, it is unlikely that the recommendation for the selected communities to change water sources, from groundwater to Lake Michigan, would produce significant socio-economic imbalances through 2035.*
  - *Under the RWSP, the delineated areas are, for the most part, areas that are currently developed or undevelopable. Also, the majority of developable lands should be considered infill development.*
  - *Any population increases would be based not only on a combination of fertility, mortality, and migration, but also on an incremental growth due to the expansion of the water utility service areas into areas that are currently developed.*
- *The implementation of this recommendation presumes the development of an intergovernmental cooperative agreement and water service purchase agreement in which two or more communities would have to be in agreement over the amount of water to be provided and the delineation of the water service area. This recommendation allows for the possibility that existing regional socio-economic imbalances could be rectified through an intergovernmental cooperative agreement.*

**Development within the 2035 Projected Service Areas for  
Utilities Studied Under the Socio-Economic Impact Analysis**

**PRELIMINARY DRAFT**



Source: SEWRPC and CED

- Areas to be Developed and Served within the 2035 Projected Service Area (as of Year 2005)
- Areas Developed as of 2005
- Environmental Corridors
- Parks, and Open Spaces (very limited services)
- Areas With Existing Development NOT to be served under Smart Growth Plan and RLUP
- Projected Areas With Proposed Development NOT to be served under Smart Growth Plan and RLUP
- Other Conservancy Lands to Be Preserved



## Source of Supply

- Existing Utilities to Remain on Current Supply (no significant changes)
  - Applies to the 27 existing utilities slated to remain on Lake Michigan supply, and the 42 existing utilities to remain on groundwater supply.
- *It is not anticipated that population growth, racial and ethnic population patterns, or job growth patterns will be affected by the recommendations to remain on the current source of supply. With a known source of supply, job growth will likely be impacted by other economic factors.*
- *Each of these communities has a reliable, sustainable water supply that can support existing and planned development within their delineated water service boundaries. Therefore it is anticipated that the recommendations to remain on the current source of supply will have no impact on land use or housing patterns through 2035.*
- *PSC regulates water utility rate structures to ensure that water rates are distributed fairly to users across the system. Therefore it is not anticipated that remaining on the current source of supply will have a financial impact on low-income or disabled households.*
- *There would be little to no adverse environmental or human health effects or impacts to these communities.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- Existing Utilities to Change Source of Supply (and potential provider utilities)
- *Past trends indicate that a significant increase in the number and percent of low-income persons or families living at or below the poverty level has occurred over the past 40 years in the cities of Kenosha, Milwaukee, and Racine while it has declined in many of the selected suburban communities. These trends are likely to continue regardless of source of supply.*
- *Ultimately, this recommendation presumes the development of both a water purchase agreement and an intergovernmental cooperative agreement between purchasing and potential providing utilities.*
  - *Opportunity for communities to engage in the negotiation process, to engage in trade either for services or monies, and to offset any potential negative socio-economic impacts.*
  - *Both parties need to be in agreement regarding the delineated service area and the amount of water that would be provided - growth in the receiving community would be a known factor.*
  - *Provider and purchasing communities would be able to negotiate a non-compete term to avoid job and business “poaching”.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- Existing Utilities to Change Source of Supply (and potential provider utilities)
- *The recommendation helps to improve system efficiency, keep system costs low, and ultimately, encourage lower rates. The decision to switch five of the nine selected utilities was based, in part, on the excess capacity of Milwaukee Water Works which currently utilizes only about half of its designed water production capacity. In order to serve additional wholesale utilities, some of the other Lake Michigan producers' facilities would need to invest in major expansions, and the costs of the upgrades would be passed along to new customers.*
  - *PSC oversight of water utility rates are intended to be designed to protect existing customers from having to subsidize the needs of new customers. Any new users would be subject to an impact fee or appropriate charge to hook onto the existing system.*
  - *Water rates in the communities served by a Lake Michigan supplier would be reduced if the provider utility's service area and customer base were to expand. Fixed costs make up the greatest portion of the rates (70 percent or more) - these would be distributed over a larger base, resulting in reduced rates for all customers and potentially benefiting those areas with a higher percentage of lower income populations.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- Existing Utilities to Change Source of Supply (and potential provider utilities)
- *The recommendation was made, in part, to aid in improving local groundwater quality. If carried out in environmentally sensitive ways, this should improve environmental quality for all populations.*
  - *Compared to a “do nothing” option, it is unknown as to whether or not future water service area expansions would follow a compact urban design and therefore unknown adverse environmental or disproportionately adverse impacts on the communities.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- New Utilities
  - Applies to the 21 potential new utilities recommended to utilize groundwater supply and the 2 potential new utilities to utilize Lake Michigan supply
- *Development of a new utility to serve areas of existing development would only occur if there was a demonstrated local need and initiative.*
  - *Demonstrated needs include health issues concerning water quality (eg arsenic or radium), safety issues (fire protection), or cost concerns (private well treatment costs)*
  - *In such cases, a municipal system would likely be beneficial to all including low-income hh*
- *For the 21 potential future utilities to utilize groundwater supply, which are predominantly located around lakes in the western portion of Waukesha County or in the Fox River watershed throughout Racine and Kenosha Counties, it is unlikely that the development of such systems would have an impact on population growth or minority or ethnic distribution patterns.*
- *The 21 potential future utilities recommended to utilize groundwater were delineated based on existing development, therefore it is unclear whether or not the development of a water utility system could have an impact on job growth.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- New Utilities
- *For the 2 new utilities to utilize Lake Michigan supply, due to limited lands for development, it is unlikely that development of a municipal water supply would spur new job growth, although it could help to ensure the viability and safety of existing businesses and promote redevelopment efforts.*
- *It is unlikely that the development of such systems would have an impact on population growth or minority or ethnic distribution patterns as the primary basis for the delineation of the 23 potential future utilities is existing development.*
- *It is unlikely that the delineations created under the RLUP would have a major impact or shift in land uses or housing patterns within the region. The delineations of the newly proposed utilities were based either upon areas of existing urban development that most likely could be served by municipal water utilities, or on areas in which there are certain environmental considerations that would need to be addressed.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- New Utilities
- *Costs and impact fees were evaluated:*
  - *The planning, development, and construction of a new water utility system involves significant financial resources which would ultimately be paid for by the water utility consumers. This could ultimately have financial impacts on low-income homeowners residing within those proposed utility service areas if they are required to connect to a municipal system.*
  - *The development of a new utility is achieved in part through assessments charged to homeowners and all property owners to cover the cost of making a physical connection to the utility service, and also to cover a portion of the costs of the utility development. The costs can be significant especially in comparison to the costs of operating and maintaining a private well.*
  - *To the often financially stressed low-income households that reside within the potential future utility service areas, and even to moderate-income households, impact fees which are often thousands of dollars can be a financial hardship.*
  - *Impact fees can also cause political and legal problems for potential consumers, utilities, and municipalities regardless of income levels within a community.*

# SocioEconomic Impact Analysis: Summary

## Source of Supply

- New Utilities
- *The development of a new municipal water utility would be based on a demonstrated local need and initiative, and presupposes the development of an environmental analysis. The demonstrated local need may be based on specific environmental factors that need to be addressed. For those 21 potential new utilities to utilize groundwater supply and the 2 new utilities to utilize Lake Michigan supply, it is assumed that an environmental analysis would help to identify any potential adverse environmental impacts as well as environmental injustices.*
  - *For these communities, however, the “do nothing” option may or may not have an adverse environmental impact; continued monitoring may be necessary if an adverse environmental or human health impact is suspected.*
- *Recommendation: the RWSP should include information on how communities or new utilities can provide assistance or low- or no-interest loans for low- to median-income homeowners.*

# SocioEconomic Impact Analysis: Summary

## Water Conservation Programming

- Water conservation measures, at any level, are designed to both improve the use of supply and therefore to sustain all sources of water supply for all water consumers. The following applies to all of the existing and proposed utility service areas;
- *Based on the recommendations, it is likely that the water conservation measures implemented at the local level could encourage customers to reduce water use.*
- *It is unlikely that water conservation programming would have any negative fiscal impact on low-income households, and any savings at the utility level could be passed on to all utility customers including low-income customers.*
- *Although conservation programs could lead to reductions in lawn watering or changes in landscaping practices, it is unlikely that this could have any widespread impact or change in land use or housing patterns, and it is unlikely that there would be any impact on land uses and household patterns.*
- *As water conservation measures are intended to improve the quantity and quality of all water supplies within the region, it is unlikely that the implementation of this recommendation would cause any disproportionate environmental justice impacts.*

# SocioEconomic Impact Analysis: Summary

## Recharge Area Protection

- Currently, there are no regulatory constraints, at either the state, county or local levels, regarding development in (high or very high) groundwater recharge areas.
- *The recharge areas are typically undevelopable or undeveloped open space lands therefore it is unlikely that there would be any significant impact on any segment of the population.*
  - *As such, it is unlikely that the implementation of this recommendation would cause any disproportionate environmental injustice impacts*

*Recommendation: The delineation of recharge areas for protection should, if applicable, include an inventory of the population and land use, and any development of local, county, or state regulations regarding recharge areas should take into consideration any potential ramifications that the implementation of regulations could have on the populations of the delineated recharge areas.*

# SocioEconomic Impact Analysis: Summary

## Stormwater Management Practices

- Stormwater management practices are generally considered to be safeguards to ensure a safe, abundant groundwater supply;
- *There is no clear, identifiable linkage between the implementation of the stormwater management practices recommendation and the potential for having an impact on population growth or minority, ethnic, and disabled population distribution patterns or job growth and distribution in the Region.*
- *The implementation of the stormwater management practices recommendation most likely would have a positive impact on land uses or household patterns in the Region. This recommendation also provides an opportunity to study the impacts that various stormwater infiltration and recharge practices may have on various land uses (different types and densities) and housing patterns, and in turn can help to further direct land use planning.*
- *It is unlikely that stormwater management practices would have an adverse impact on the environment or that it would cause any disproportionate environmental injustice impacts.*

# SocioEconomic Impact Analysis: Summary

## High Capacity Well Siting Procedure Changes

- The RWSP recommendations for improving high capacity well regulations are based on improving methods to safeguard the quantity and quality of the groundwater supply, and for insuring that groundwater extraction will not have a negative impact on nearby surface waters through baseflow depletion.
- *There is no clear, identifiable direct linkage between the implementation of the high capacity well recommendation and the potential for having an impact on population growth or minority and ethnic distribution patterns, job growth or distribution, or overall land use patterns in the Region. This recommendation implies adoption of regulations incorporating well siting procedures. Development of high capacity well regulations should take into consideration any potential impacts on all nearby populations and land uses.*
- *It is unlikely that the high capacity well recommendation would have an adverse impact on the environment or that it would cause any disproportionate environmental injustice impacts.*

# SocioEconomic Impact Analysis: Summary

## Enhanced Rainfall Infiltration Systems

- The determination to use enhanced rainfall infiltration systems is based on local conditions and the appropriate type of groundwater recharge infiltration system would need to be determined on a site specific basis.
- *As the enhanced rainfall infiltration systems typically involve open space areas, there should be no foreseeable significant impact on land use or housing patterns, population growth, or job growth and distribution in the Region.*

# SocioEconomic Impact Analysis: Summary

## Evaluation of the RWSP in Light of Public Participation

Office of Environmental Justice *Toolkit* provides guidance to evaluate whether or not any relevant person or group has been denied an opportunity for meaningful involvement in governmental decision-making relating to the distribution of environmental benefits or burdens.

- *Recommendation: for any future updates to the Regional Water Supply Plan, it is recommended that SEWRPC and the Environmental Justice Task Force establish a process for selecting one or more representatives from either the EJTF or from the Environmental Justice community for the RWSP Technical Committee.*
- *Recommendation: for any future updates to the Regional Water Supply Plan, it is recommended that SEWRPC adopt a formal public participation plan.*

## Thanks

- Questions?
- Further information regarding the socio-economic impact analysis and comments can be made at <http://www4.uwm.edu/ced/sewrpc/index.cfm>
- Please contact Kate Madison directly at [cmadison@uwm.edu](mailto:cmadison@uwm.edu) or at (414) 229-6155