Attachment 3
Preliminary draft - Chapter 7
Summary and Conclusions

This socio-economic impact analysis provides an evaluation of each of the six recommendations set forth in the Regional Water Supply Plan, to determine their impact on populations within the Southeastern Wisconsin region. The Center for Economic Development evaluated each of the following six categories of recommendations to determine their socio-economic impact on the Southeastern Wisconsin region:

- Source of Water Supply
- Water Conservation Programming
- Recharge Area Protection
- Stormwater Management Practices
- High Capacity Well Regulations
- Enhanced Rainfall Infiltration Systems

The following questions provided the framework for developing the SEI analysis:

- What impact, if any, would implementation of the regional water supply recommendations have on the overall distribution of population, including racial segregation patterns, in the Region?

- What impact, if any, would implementation of the regional water supply recommendations have on the overall distribution of job locations in the Region?

- What impact, if any, 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, if any, would implementation of the regional water supply recommendations have on housing and other land use patterns in the Region?

- To what extent, if any, 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?

The study was designed to answer these questions by considering each of the RWSP recommendations individually and determining their impact on population, job locations, segregation patterns, housing patterns, the fiscal health and well being of environmental justice communities, and their compliance with federal civil rights and environmental justice regulations.

Basis for the Findings of the Socio-Economic Impact Analysis of the Regional Water Supply Plan

Many of the conclusions drawn in the socio-economic impact analysis rely heavily on the findings in *Technical Report No. 47, Groundwater Recharge In Southeastern Wisconsin Estimated By A GIS-Based Water-Balance Model* and in *Technical Report No. 41, A Regional Aquifer Simulation Model for Southeastern Wisconsin.* These studies were developed as part

of the Regional Water Supply Planning process by the Southeastern Wisconsin Regional Planning Commission (SEWRPC), the Wisconsin Geological and Natural History Survey (WGNHS), the United States Geological Survey (USGS), the Wisconsin Department of Natural Resources (DNR), University of Wisconsin – Milwaukee and other Wisconsin groundwater experts. The data compiled by these studies currently provide the latest, most thorough examination about what is known of the groundwater supply in southeastern Wisconsin. The science concludes that southeastern Wisconsin is currently a water-abundant Region, and suggests that the provision of Lake Michigan water to suburban communities is not essential as existing groundwater sources, *if properly managed*, are of sufficient quantity and quality to support *projected* development through the year 2035. No other studies of which we are aware contradict the conclusions of the WGNHS, USGS, DNR, SEWRPC, and other agencies.

We emphasize that while existing studies suggest that regional groundwater supplies can sustain development for the near future in most areas not currently receiving Lake Michigan water, there are several important caveats. First, little is known about the sustainability of groundwater supplies beyond the year 2035. Existing studies do not extend beyond that year. Second, existing studies base their projections about the sustainability of groundwater supplies on current land use plans, which can be altered. Changes in regional land use plans may require that conclusions about the sustainability of groundwater supplies be reexamined. Additionally, studies emphasize that groundwater supplies in certain areas of the region are likely to be sustainable only if properly managed including conversion of some utilities which are east of the subcontinental divide or straddle the divide to Lake Michigan supplies. Finally, the use of groundwater does have impacts on base flows to surface waters which are variable across the region.

Although the Regional Water Supply Plan addresses recommendations for each of the 78 public utilities in the seven-county southeastern Wisconsin region, most of the socio-economic impact analysis was limited to developing an understanding of the relationship between the 5 existing or potential Lake Michigan water service providing utilities and the 9 potential Lake Michigan receiving utilities. During the scoping phase of the SEI analysis, it became clear that the relationship between potential water providing utilities and receiving utilities would be the likely source of any socio-economic imbalances, and due to this potential for conflict, this dynamic should be explored and evaluated.

The evaluation of the RWSP took into consideration additional relevant plans, including SEWRPC's Regional Land Use Plan (RLUP), and relevant local and countywide comprehensive plans, including the planned land use components. The regional land use plan and the land use elements of the comprehensive plans provide the necessary components for understanding how the recommendations set forth in the RWSP will impact development and land use. CED compared existing and planned land uses projected in both the local comprehensive plans and the RLUP for specific communities in order to determine whether or not the land use patterns within the areas proposed for expansion or conversion under the RWSP could have an impact on environmental justice.

Socio-Economic Trends in Southeastern Wisconsin

The historic development patterns in Southeastern Wisconsin outline the need for a socio-economic impact analysis. CED summarizes these historic trends in population, jobs, and income in Chapter's 2, 3, and 4 for each of the communities and counties selected for this study. The 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. Data 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 in the cities of Kenosha, Milwaukee, and Racine while it has declined in many of the selected suburban communities. 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.

In order to gain a better understanding as to how the six RWSP recommendations may impact the community over the planning period, CED also evaluated job projections and developed population projections by race, ethnicity, and disability for the year 2035. CED's cohort component model projects both numerical and proportional growth of the minority populations in each of the "selected communities" through the planning year 2035, although increases will be negligible in some communities. If trends over the past 50 years continue, migration of the White Alone, Non-Hispanic populations from the Cities of Milwaukee and Racine will continue to contribute to growth in suburban areas, and the White Alone populations in the cities of Kenosha and Waukesha are projected to decline in number and proportion while increases in minority populations will account for all of the population growth in those cities.

These trends indicate the need to evaluate the relationship that water distribution may have on development.

Evaluation: Is the way in which water is distributed a constraint on development?
Although the USGS and SEWRPC studies indicate that problems with groundwater quality and quantity are not widespread and are based on isolated conditions, and that groundwater resources are not currently a constraint on development in southeastern Wisconsin, there is ongoing debate over whether or not access to Lake Michigan water is necessary to support future development in parts of the region. Based on input from the focus groups and website comments, much concern was expressed that the provision of Lake Michigan water to the purchasing communities would promote continued sprawl development, particularly in the western suburbs where it is perceived that the proposed service area expansion provides considerable room for development. Assertions were made that the Regional Water Supply Plan failed to evaluate whether limiting growth to infill development would result in more regional equity.

During the scoping phase of the SEI study, it became evident that the relationship between water distribution and development lies at the center of this socio-economic impact analysis and that having a clear understanding of the relationship between water distribution, water source, land use, and development is necessary for identifying or evaluating any potential socio-economic impacts. In order to address part of this issue, CED held a series of focus groups with planners, utility managers, and developers to gain a better understanding of the relationship between water, water infrastructure, and development in southeastern Wisconsin.

- *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.*

A review of past socio-economic trends, as shown in Chapters 2, 3, and 4, indicates that there have been significant declines in income and other growth indicators over the past 40 years in the cities of Kenosha, Milwaukee, and Racine, while growth and development have tended to favor the suburban communities. The data also indicates that there are continued and growing socio-economic imbalances within the region that have had an increasingly negative impact on the larger urban core areas, particularly in the cities of Milwaukee and Racine. The question has been raised regarding land use changes within the projected service areas, whether or not any potential development within the undeveloped areas could have an impact on any socio-economic imbalances within the region.

Based on CED's land use analysis, the delineations of the existing and proposed utility service areas include lands that are for the most part, either currently developed or un-developable under the RLUP. The land use analysis also indicates that the majority of undeveloped lands within the projected service areas are primarily infill development. Under the RWSP, growth is limited to the existing development as well as to primarily infill developable areas within the proposed expanded water utility service areas. It is therefore not anticipated that either the projected population growth or the distribution of ethnic and racial minorities, or disabled populations as projected under the CED cohort component analysis will be caused by implementation of the recommendation to change sources of water supply. Any major population increases would be based not only on a combination of fertility, mortality, and migration, but also on an incremental growth due to expansion of the water utility service areas into areas that are currently developed. These areas were delineated under the RLUP, and based on their projected densities and land, as set forth under their respective adopted comprehensive plans, should be considered serviceable by either water or sewer utilities.

- *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 yield any significant socio-economic imbalances through 2035.*
- *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.*

These issues needed to be addressed prior to an evaluation of each of the six recommendations under the RWSP.

Evaluation of the RWSP Recommendations

The questions listed at the beginning of this chapter provided the framework for the socio-economic impact analysis. Each of the six recommendations in the RWSP was evaluated in light of the following topics addressed:

- Impact on the population distribution, including racial segregation patterns (Chapter 2)
- Impact on job growth and job patterns (Chapter 3)
- Impact on low- and moderate- income families (Chapter 4)
- Impacts on housing and other land use patterns (Chapter 5)
- Impact on Environmental Justice (Chapter 6)

Source of Supply

Based on results from the focus groups, changing the source of water supply appears to be the most contentious recommendation in the RWSP due to the potential for conflict between

some of the utilities and their communities. A total of 23 potential water utility service areas and 78 existing utilities were evaluated under the RWSP. Of the 78 existing utilities, it was recommended that 27 remain on Lake Michigan supply and 42 utilities remain on groundwater supply. The potential for conflict would only arise between 9 existing utilities recommended to be converted from groundwater to Lake Michigan as the source of supply, 2 new utilities proposed to utilize Lake Michigan water, and 5 potential provider communities. Due to the potential for conflict between providing and receiving communities, much of the analysis focused specifically on these 16 utilities.

Existing Utilities to Remain on Current Supply
The following findings apply to the 27 existing utilities recommended to remain on Lake Michigan supply, and the 42 existing utilities to remain on groundwater supply.

- *It is anticipated that population growth or racial and ethnic population patterns will not be affected by the recommendations to remain on the current source of supply.*
- *It is anticipated that future job growth will not 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 future land use or housing patterns.*
- *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.*

Existing Utilities to Change Source of Supply
The following findings apply to the nine utilities recommended for conversion from groundwater to Lake Michigan as source of supply. The recommendation proposal to change the source of supply was based on a number of factors including favorable environmental impacts to aid in the recovery of the deep aquifer; to improve or maintain baseflows to surface waters; to reduce chloride discharges to streams; to preserve groundwater for other uses; and to take advantage of the Milwaukee Water Work's excess capacity which has helped keep production costs low and could provide associated fiscal benefits for Milwaukee residents.

- *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.*
    - *This recommendation provides an 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, real or perceived, that might exist between the communities.*
    - *Under a typical purchase agreement, customers within the purchasing utility would have to pay for the costs of the distribution infrastructure, including the costs to hook onto the Lake Michigan system; these costs would be included*

in new rates developed by each of the receiving utilities to equitably disperse any additional costs among consumers.

- *Wholesale rate structures developed by the providing utility would have to take into account the addition of each utility and its potential impact on its own system.*
- *Any new users within the proposed service areas would be subject to an impact fee or other assessment to hook onto the existing system. Under each new purchase agreement, any negotiated upfront fees or monetary assessments, including those used to cover the provider community's costs, would likely be distributed among the receiving utility's consumers within their rate structures.*
- *Both the receiving and providing community would have to be in agreement regarding the proposed delineated service area along with the amount of water that would be provided. This assures that growth in the receiving community would be a known factor.*
- *In any new purchase agreement, any upfront fees negotiated through an intergovernmental agreement would also be distributed among the receiving utility's consumers within their rate structures.*
- *Based on the purchase agreement, provider and purchasing communities would be able to negotiate a non-compete term to avoid job and business "poaching".*

- *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[1] 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 producer's facilities would need to invest in major expansions, and the costs of the upgrades would be passed along to new customers.*
  - *Based on the existing regulatory oversight in place by the Public Service Commission (PSC), water utility rates are intended to be designed to protect existing customers from having to subsidize the needs of new customers.*
  - *Any new users within the proposed service areas would be subject to an impact fee to hook onto the existing system, which would have to be factored into the rate structures for both the receiving and providing utilities.*
  - *It is anticipated that the water rates in the communities served by a Lake Michigan supplier, including both retail and wholesale customers, would be reduced if the provider utility's service area and customer base were to expand. This would apply to all of Milwaukee County and the Racine and Kenosha Urban Service areas. The reason for this is that the fixed costs of the providers make up the greatest portion of the rates (typically 70 percent or more). These fixed costs 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.*
- *This 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*

[1] The proposed existing utilities that would most likely rely on purchasing wholesale water from Milwaukee Water Works include the City of Brookfield Municipal Water Utility (limited to portion east of the subcontinental divide), Village of Germantown Water Utility, City of Muskego Public Water Utility, City of New Berlin Water Utility, and the City of Waukesha Water Utility.

therefore it is impossible to establish a conclusion as to whether or not future actions outside of the plan would have adverse environmental or disproportionately adverse impacts on the communities.

New Utilities

The following findings apply to the 21 potential new utilities recommended to utilize groundwater supply and the 2 new utilities to utilize Lake Michigan supply.

- *The 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 often include health issues concerning water quality, such as arsenic or radium, safety issues such as fire protection services, or cost concerns such as private well treatment costs.*
    - *In such cases, a municipal system would likely be the most beneficial to all involved including low-income persons within the proposed service area.*
- *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.*
- *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.*
- *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.*

- *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 or a sub-recommendation on how communities or new utilities can provide assistance or low- or no-interest loans for low- to median-income homeowners.*

Water Conservation Programming

A water conservation program is identified as a combination of practices, procedures, policies and technologies to reduce the amount of water used or to improve or maintain water utility system efficiency. The recommendations regarding water conservation programming in the RWSP are two-fold in their design: first, they were developed to increase water system efficiency which reduces the amount of water pumped to meet customer demands, and second, to reduce the amount of water used by customers. The RWSP includes a range of recommendations for water conservation programming, depending on the infrastructure needs of each water utility and the source of supply as shown in Table 58 in Planning Report 52.

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 their 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.*

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 RWSP recommends that important groundwater recharge and discharge areas should be identified for preservation or for application of land development plans and practices that protect groundwater quality and maintain the natural surface and groundwater hydrology. It does not, however, give further instruction as to specify any new regulatory constraints, and as SEWRPC is an advisory body, it does not hold the authority to create or enforce new regulatory constraints.

Based on the RWSP recommendation related to recharge area protection;

- *The recharge areas, by their nature, are typically undevelopable or undeveloped open space lands, or lands within the delineated environmental corridors that SEWRPC recommends not be developed, 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.*
- *There is no credible method to draw a linkage between the implementation of the recharge area protection recommendation and the potential for having an impact on population growth or minority, ethnic, or disabled population distribution patterns in the Region.*
- *Based on a lack of regulatory constraints and a lack of formally delineated recharge areas, there is no credible method to draw a linkage between the implementation of the recharge area protection recommendation and the potential for having an impact on low-income households in the Region.*
- *It is unlikely that the installation of enhanced rainfall infiltration systems would have an adverse impact on the environment or that it 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.*

Stormwater Management Practices

Similar to groundwater recharge, stormwater management practices encourage groundwater treatment and infiltration (recharge) in order to best maintain the natural hydrology between surface waters and groundwaters, and therefore, to contribute to a sustainable groundwater supply. The RWSP recommends following stormwater best management practices related to infiltration and recharge for all new residential and for selected nonresidential developments.

Regulations regarding stormwater management and its related land management practices are set forth by the State of Wisconsin in NR Chapters 151-155, NR 216, NR 243, and ATCP 50 of the Wisconsin Administrative Code, and administered at the County or local level through various zoning ordinances. Stormwater management practices are generally considered to be safeguards to ensure a safe, abundant groundwater supply, and although unlikely to have an impact on population or job patterns, state-of-the-art stormwater management practices may require restrictions on specific types of land uses.

Based on the RWSP recommendation to follow best management practices related to stormwater infiltration and recharge for all new development;

- *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.*

High Capacity Well Siting Procedure Changes

Currently, the Wisconsin Department of Natural Resources regulations require a permit application for all new high capacity wells. The DNR review includes the potential impact of the well on nearby municipal wells and selected adjacent surface waters among other things. The RWSP provides guidance regarding the siting of all new high capacity wells and for monitoring the impacts that such wells may have on the shallow aquifer. 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.

This recommendation implies adoption of regulations incorporating well siting procedures, and development of such regulations should take into consideration any potential impacts on existing housing or land use patterns. Additionally, the RWSP recommendation to improve high-capacity well siting methods and regulations provides an opportunity to study the impacts that high-capacity well siting can have on various land uses (different types and densities) and on housing patterns. This in turn can provide greater insight into the impacts that high-capacity groundwater pumpage can have on local land uses and conditions within southeastern Wisconsin, and can help to further direct land use planning.

Based on the RWSP recommendation to improve high capacity well siting methods and regulations,

- *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.*

Enhanced Rainfall Infiltrations Systems

Enhanced rainfall infiltration systems are artificial methods to recharge groundwater. The RWSP recommends the use of enhanced rainfall infiltration systems in conjunction with the siting of shallow aquifer high capacity wells, if siting studies indicate that baseflow reductions to nearby surface waters could be materially affected.

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 in the Region.*
- *Based on these constraints, there is no clear linkage between the implementation of the enhanced rainfall infiltration system recommendation and the potential for having an impact on population growth or minority, ethnic, and disabled population distribution patterns in the Region.*

- *There is no clear linkage between the implementation of the enhanced rainfall infiltration system recommendation and the potential for having an impact on job growth or distribution patterns in the Region.*

Evaluation of the RWSP in Light of Public Participation

As part of the socio-economic impact analysis, CED examined whether or not the implementation of the regional water supply recommendations could contribute to any failure of the plan to meet Federal regulations attendant to civil rights and environmental justice. This includes an evaluation of the RWSP planning process itself.

The planning process demands that planners find a way to directly engage those whose lives and communities could ostensibly be impacted by planning decisions at all levels, particularly in minority and low-income communities. Assessing community perceptions about regional development is most difficult when portions of that community may not be engaged in the planning process. The third point in the Office of Environmental Justice *Toolkit* asks whether or not Environmental Justice communities have been sufficiently involved in the decision-making process. The *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.

While SEWRPC conducted considerable public outreach during the course of the RWSP planning process, 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. Although environmental justice communities were solicited to provide feedback and insight throughout the planning process, the lack of direct inclusion in plan development violates the intent of Principle 7 of the Principles of Environmental Justice. It may also weaken the plan as it denies an opportunity for SEWRPC to engage with environmental justice communities in order to gain support for plan recommendations.

- *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.*

There has been a growing trend in community-level planning towards the formalization of public participation plans, partially due to the widespread implementation of comprehensive and "Smart Growth" planning efforts. A public participation plan provides a formal document that outlines the specific strategies that are used for public engagement[2]. Developing a formalized public participation plan or strategy for each of the region-wide plans, similar to the public participation plan that SEWRPC adopted for the Regional Transportation Plan[3] and each of the county-wide comprehensive plans, may help to facilitate effective public involvement and add to greater transparency in the planning process.

- *Recommendation: for any future updates to the Regional Water Supply Plan, it is recommended that SEWRPC adopt a formal public participation plan.*

[2] Miskowiak, Douglas Center for Land Use Education *Crafting an Effective Plan for Public Participation,* November 2004 http://www.uwsp.edu/cnr/landcenter/Publications/PublicParticipation.pdf

[3] SEWRPCs Public Participation Plan for Transportation Planning http://maps.sewrpc.org/transportation/taskforce/pdfs/sewrpc_public_participation_plan.pdf

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