SOUTH MIAMI-DADE WATERSHED STUDY TECHNICAL REVIEW COMMITTEE (TRC)

Summary Outline of TRC Comments: Meeting Two

The following outline summarizes the comments made by the Technical Review Committee for the South Miami-Dade Watershed Study during the course of their meeting on November 6, 2003. The meeting was held at Nova Southeastern University. A list of TRC members who participated in the meeting is at the end of this summary outline (Appendix A).

TRC Meeting Overview

The day began with a welcome, introductions, and review of the meeting agenda by Jim Murley, Director, TRC Moderator. The meeting, he noted, would consist of the following components:

- Review of the topics for TRC review and information updates by John Hulsey, Project Manager for the Watershed Study and a Senior Planner for the South Florida Regional Planning Council (SFRPC)
- Updates on the Watershed Study Planning Process by representatives of Keith and Schnars, the project consultants for the South Miami-Dade County Watershed Study
- Sub-Task Presentations by Keith and Schnars and TRC response
- Summary TRC comments and next steps
- Public comments

Review Topics for TRC Review and Updates

John Hulsey made the following points in his presentation.

- The main focus of the November 6 TRC meeting, as contemplated by the project schedule, is for TRC members to comment on the draft work products for sub-tasks 1.1-1.7. In addition, each TRC member will be asked to comment on what he or she views as the desired outcomes of the study and plan.
- The TRC will have a homework assignment: following the meeting, send suggestions for parameters to be used in judging alternative actions and, if standards or thresholds already exist for those parameters, identify them and their source. This information should be submitted electronically to Hulsey (hulseyj@sfrpc.com) by December 12, 2003.
- The recommendations from the Miami-Dade County Agricultural Land Retention Study are still under discussion and so will not be presented to the TRC at this meeting.
- The SFRPC's legal opinion about the abilities of the TRC to discuss issues among themselves and with the project consultants outside of TRC meetings was sent to the TRC in the materials for this meeting. The opinion makes three important points:
    - The TRC is not an elected board or commission or staff of an agency or authority of government.
    - The TRC does not make final, legally binding decisions, but rather makes recommendations for consideration by the project consultants.

- The TRC is not subject to the Sunshine Law, although notice is given, the public may speak, and records are being kept of TRC meetings.

Hulsey also reviewed the process that had been established for addressing TRC and other comments about the work products. A TRC Management Group, with representatives from among the signatory agencies for the Watershed Study and Florida Atlantic University's Catanese Center for Urban and Environmental Solutions (CUES), has been created. This group will meet at the end of each TRC meeting to review the TRC's recommendations. It will use these meetings to reach a consensus on which TRC comments the project consultant should be directed to address in the work product; which comments require more information, clarification, or further thought before addressing them (including who is responsible for doing so, and by when); and which comments cannot be addressed by this study and why.

Also following each meeting, Hulsey noted, the CUES will formalize the comments recorded at the TRC meeting; from that summary, the project consultant will prepare a response. This response, as it was for the first TRC meeting, will be forwarded to the TRC. In addition, time will be set aside on the agenda for the next TRC meeting to review TRC comments and the project consultant's response to them. An example of the response to the TRC's comments at their first meeting is a series of meetings of a working group created to discuss the desired outputs from the water resources assessments. The purpose of these meetings is to assure that if any needs are not met by the XP-SWMM, another means of assessment is available to provide the necessary outputs. A similar set of meetings is planned to discuss the holistic approach to the study.

Updates on the Watershed Study Planning Process

This component of the agenda consisted of two parts: a review of the Watershed Study planning process from conception to implementation and a review of how the project consultant addressed the TRC's comments from its first meeting. TRC comments about the overall study process included the following. The study process needs to:

- Describe nodal development as part of the scenarios

- Document and analyze the existing character of the study area – why it is special and what makes people love it. This needs to be done in order to measure the qualitative (in addition to the quantitative) impact of the three scenarios on the character of the area and its quality of life. It also is consistent with the Watershed Advisory Committee's vision statement for the Watershed Study, which is qualitative.

- Take into account changes in the agricultural economy and should develop contingency plans if the Miami-Dade County Agricultural and Rural Area Plan is not adopted

- Address how the Watershed Plan will deal with changes in sea level rises, salt water intrusion, and flooding

- Look at changes in quality of life as current permitted units develop

- Consider extreme wet and dry years, rather than using an average annual rain fall. This should include the effects on agriculture and the environment.

- Provide a synthesis map that identifies the natural and built areas and the resources that are strategically the most important. Individual maps can be used to back up the syntheses map.

- Look at the Palm Beach County exchange with the Florida Department of Community Affairs about using county generated, versus state (Bureau of Economic and Business Research),population projections

In addition to these comments, it was suggested that the project consultant attend the November 17 meeting of the Advisory Committee for the Miami-Dade County Agricultural and Rural Area Study.

TRC Comments on Sub-Tasks 1.1-1.7

The following summarizes the comments of the TRC and project staff on the draft work products for subtasks 1.1-1.7 of the Watershed Study.

Part One

Sub-Task 1.1 Analysis and Documentation of Relevant Studies

The TRC suggested that a table of contents be prepared for each study product. Members suggested that the following studies and sources of information be included:

- Biscayne Bay Economic Study, a new study by the South Florida Water Management District that looks at the region of the Bay

- United States Department of Agriculture's 2002 Agricultural Census, which will be electronically available in February 2004. The census is based on a survey of growers, and the results are available at the county level. Earlier surveys have shown that the typical farm size is nine acres or less.

- Information on drainage practices in Miami-Dade County and on the urban hydrology of southern Florida. Both sources of information are available from the United States Geological Survey (USGS).

- Comprehensive Development Master Plan initial recommendation reports (produced two times per year) and amendment reports (produced annually)

- Long-range transportation plans for roadways in the study area, particularly the major spine corridors. An example is the Krome Avenue Transportation Plan. Plans for the Florida Turnpike also should be included.

- Transit plans and other relevant transportation plans

Other recommendations on this sub-task included that the project consultant should:

- Prepare a summary report (some 20 pages) that synthesizes the studies and highlights how they will be used in the subsequent tasks. An index of studies and reports also should be developed. In addition, in the report on this task, the names of the studies should be in all capital, bold letters so that the name stands out when looking at the page.

- Be selective in how the studies are used. It is important to show the context for each relevant study that is included in this sub-task. For example, in the Miami-Dade County Agricultural and Rural Area Study, some of the numbers were based on assumptions, which means that the project consultant should avoid using them. Preparing a synthesis summary of the relevant studies also will help illustrate the context of each study.

The discussion of this task ended with the instruction that TRC members who have additional comments on any of the relevant studies that should be included in this sub-task should submit the names of the studies to John Hulsey by November 14.

Sub-Task 1.2 Population Growth

The TRC had a number of comments on population growth.

- Households are a critical aspect of the study. Age cohorts, not past trends, should be used in projecting the number of households.
- Several of the study area tracts should receive a closer look. One is tract 5.3 where the tables show that while the population is decreasing, the number of households is increasing. Tracts 6.1 and 6.2 also should be analyzed. These are the areas where most of the population growth is projected to occur, yet the study shows that there is very little land left for new development and a lack of infrastructure.
- The project consultant should structure the inputs to the ultimate model now, so that it is possible to determine if the study process is yielding the information needed in order to see the differences needed for the alternatives scenarios.
- The linear extrapolation of population is unacceptable, meaning that the population projections should be reworked. The reworking should look at the impact of the Urban Development Boundary (UDB) and should get away from mathematical projections at the small area level.
- The population analysis should examine population trends outside the study area. For example, downtown Miami is showing an increase in population growth, but a reduction in the number of households. These trends may be able to be extrapolated to other areas.

Other comments related to this sub-task included the following.

- It is important to look at the land capacity of the different census tract areas. This should include an analysis of the amount of vacant land, the potential for redevelopment and greater densities, and the location of the Urban Development Boundary.
- There needs to be more synthesis of how the areas relate to each other. This analysis should link population growth by watershed sub-basins, not census tracts, and should include the amount of impervious surfaces under different growth projections.
- The project consultant should meet with Miami-Dade County on doing projections at the Traffic Analysis Zone (TAZ) level. These projections go to the year 2025.
- It will be important to look at the big picture portrayed by the population projections. For example, the project consultant's estimates show a study area population increase of 640,000 and household increase of 160,000. Of this growth, 90 percent is projected to occur in tracts 6.1 and 6.2. Ask yourself, "Are we satisfied with this being our current big picture?"

- Both county (for control purposes) and specific tract level projections should be used to ensure the best level of confidence.

Several questions were raised about the use of Miami-Dade County census tract population projections. One comment was that these projections should be used to get a finer grain sense of what is happening with the population for control purposes. For example, an analysis at the smaller area level will show that the rapid growth of the 1990s in tract 6.2 will not continue into the future (as now projected by the project consultant) because of policy constraints and the fact that the area is already capped out in terms of development. Another comment questioned the consultant's generating new population projections (like reinventing the wheel), rather than using Miami-Dade County's population projections. The project consultant responded with two comments: first, meetings will be held with the county to obtain their population projections, and second, the consultant's projections can be used as an independent party validation of the county's data.

Sub-Task 1.5 Water Resources

TRC general comments about this sub-task included the following.

- The different types of agriculture should be considered when analyzing water resources.
- The study should address water treatment capacity and provide an analysis of stormwater. (It was noted that this analysis would occur in Task 3.2.)

The TRC also made a number of comments about water quality.

- The TRC should validate water quality predictions. A graph would be a useful way to display this information.
- The study should define what constitutes the degradation of water quality in relation to the Bay and should demonstrate the relationship of water quality degradation to land use.
- The implications of some of the canals being designated as impaired in the future need to be considered. Information should be obtained that shows the sub-basins or canals that are either currently impaired or likely to become impaired given projected population and development.
- Related to this, a table should be prepared that rates each sub-basin and, ideally, each canal that feeds into Biscayne Bay.

A number of comments were made by the TRC about the impervious surface coverage in the study area.

- The study needs to show the amount of impervious surface coverage in the sub-basins now and under the 2050 population projections. This information should include the percentage of an area that has impervious surface coverage to help people who are not water modelers visualize the impact of this coverage. The information also should show the areas where there are already water quality problems.
- A table should be prepared that shows the amount of impervious surface in each of the watershed sub-basins.

In addition to the above, the TRC discussed the use of the XP-SWMM model for the study. It was noted that during the discussions of the XP-SWMM following the first TRC meeting, the decision had been made to continue with its use as the best model available.

The following comments were made about the use of XP-SWMM.

- Using XP-SWMM is the right thing to do; however, it is a double-edged sword as it provides detailed information on the landside, but not on the Bay.
- The TRC should help determine the thresholds and parameters for water quality modeling and should try to validate the water quality predictions of XP-SWMM.
- XP-SWMM cannot differentiate between wastewater and re-used water.
- Ongoing research is being conducted to get a better handle on the region's hydrology, although this information will not be available in time for this study.

Part Two

Sub-Task 1.3 Development Features

TRC general comments about development features included the following points.

- The project consultant should clarify what the Miami-Dade County Department of Environmental Resources Management's (DERM) reference to future land use means. (It was noted that the Miami-Dade County Department of Planning and Zoning provides DERM a 15-year projected land use for modeling data at the general level.) The project consultant also should look at the possibility of obtaining more current DERM land use data. Flying the study area, if feasible, was mentioned as one way to obtain more current land use data. (It was noted that DERM would check on the ability to convert 2000 land use data to the DERM land use categories.)
- The study products should cite the exact source of data and explain how the data have been interpreted. The study products also should add a section that summarizes and analyzes what all the information, such as the land use data, means.
- The study should include data on sewage treatment plants and their capacity.
- The project consultant should check to see if a jet fuel pipeline runs the length of the study area (installed to serve the Homestead Air Reserve Base).
- Information should be obtained on whether or not county economic development organizations are willing to convert land now designated for industrial uses to areas designated for redevelopment. The project consultant also should examine the location and appropriateness of land designated for industrial uses.

The TRC also made several comments related to the mapping of development features.

- The study would benefit from identifying and mapping "sacred" land – those areas where, because of what is important to the community, the land use should not change. These areas could include places with significant cultural and social resources.
- The location of the UDB should be added to all maps produced as a part of the study. The primary and secondary canals should also be added to all maps. For this study, it was noted, the location of canals is more important than, for example, roads.
- The specific source of each map should be noted (not just label maps as a product of Miami-Dade County).
- The location of Developments of Regional Impact (DRI) should be mapped. Under Florida law, the location of a DRI is important to property rights issues.

- The location of railroad tracks should be mapped, as well as transit plans (which, for this study, are likely more important than rail tracks). It was noted that the Watershed Plan could influence transit and visa-versa. Transportation planning studies also should be examined and mapped.

- The project consultant should obtain a copy of the TAZ and housing map from the Miami-Dade County Metropolitan Planning Organization (MPO), as well as a copy of the MPO's existing long-range plan maps. (It was noted that the 2025 map is available now and that the 2030 map will be available in January or February.)

- Well field protection areas are another development feature to identify.

Sub-Task 1.7 Land Inventory

The TRC made a number of overall comments about this task.

- Clarify what is meant by vacant land (e.g., if it is vacant and zoned for a higher use or vacant and environmentally important).

- To place the 2050 project population inside of the UDB, it will be necessary to identify more areas with redevelopment potential.

- Each of the scenarios should treat the following elements in an equal manner: conservation land that must come off the table, redevelopment opportunities, and the population capacity created. Related to this, maps in the future should distinguish among the categories of vacant, unprotected land; land used for agriculture; and land designated for redevelopment.

- The study needs a way to consider the impacts of areas that incorporate, since incorporation could speed-up the rate of conversion of undeveloped land and lead to higher density development. Related to this, the study should highlight the unique authority that Miami-Dade County has to create and dissolve cities.

The TRC also focused several of its comments on land that is to be conserved.

- The study process will need to reach a consensus on what land is to be protected before the scenarios are developed. Property rights should be considered as a part of this process.

- Land that is to be acquired through the Comprehensive Everglades Restoration Project (CERP) should be included and mapped in all the scenarios. An interagency CERP Technical Committee is developing a "footprint" for the CERP Plan. It was noted that the Watershed Study process should assume CERP will be implemented.

- Land that is to be conserved should be taken "off the table," so that it is clear where there is holding capacity for the future population. Under-utilized land also should be looked at in more detail.

- Related to the preceding point, the comment was made that the study process is at a point that it needs to move beyond the quantitative data to a qualitative analysis. Such an analysis should peel off the land that is removed from development to see what is left. Lands to be removed from development should include, for example, land that is to be purchased or protected, land that is to be used for agriculture, and land that is in public use. The result would be one map or mosaic that would show all the categories. This map could be used in evaluating the scenarios.

As with lands to be conserved, TRC members directed several of their comments toward the agricultural lands of the study area.

- Vacant land that is designated for agriculture should be defined – i.e., what is actively being used for agriculture and what is not being used for agriculture.
- Different color codes should be used to show the different types of agricultural areas. It was observed that there are three significant types of areas. On a related note, the observation was made that Area 12 should be reexamined because of its agricultural significance.
- The University of Florida study, *Economic Impact of Agriculture and Agribusiness in Miami-Dade County*, is available on-line and has information on agricultural land. This information includes the number of agricultural acres in the study and, of those acres, what land is fallow.

Sub-Task 1.6 Regulatory and Planning Agency Jurisdiction

- The information contained in the tables for this sub-task is too general and could apply to anywhere. The tables should note the strategically significant parts of an agency that supplied the information and how that agency's work relates to and can affect the future of the study area. The idea is to connect the agencies and planning jurisdictions to the context of this study.
- As a home-rule county, Miami-Dade County has unique powers that could be used strategically to implement the Watershed Plan. For example, it may be possible that the county agency that deals with the creation of cities (the Boundary Commission) could require that when a new city is created, it follow the recommendations of this plan. TRC members cited a number of examples, such as Chapter 24 of the Environmental Protection Ordinance, where Miami-Dade County exercises countywide powers.
- For municipalities to implement the recommendations of this plan, they will need to see the benefits. This means that the plan will need to be understood easily and should clearly show the benefits for an elected official, townspeople, Florida Power and Light, etc.
- It was noted that Palmetto Bay is referred to as Palmetto Bay Village.
- A matrix should be prepared that shows all the planning jurisdictions as well as the regulatory agencies.

Sub-Task 1.4 Natural Communities Inventory

- This sub-task should focus on synthesizing this vast amount of information into the strategically sensitive areas that are within the study area.
- The Florida Natural Areas Inventory (FNAI) classification system should not be used as it is too generic and does not allow a focus on what is important or unique to the study area. That is, FNAI tends to blend certain types of ecosystems together and does not necessarily identify what is important in the study area. FNAI can be used to collect data, but not for categorization or analysis of data. The study area has only three or four natural areas that should be the focal point. These areas include several different types of wetlands.

- The table showing ownership and acres is confusing in how it has interpreted some of the datasets. For example, the aquatic preserve is not an ownership category. It includes land that is in private ownership and is protected through some form of restrictive covenant or regulations. Related to this point, it was noted that clarification is needed as to what is meant by protected land, at the same time documenting what land is in public ownership. This information should include the land's current use. For example, land such as parks could be in public ownership, but in a recreational, not conservation, use. Another example is the pinelands, a lot of which is privately owned but voluntarily maintained as conservation land.
- The sub-task should provide information on how much publicly-owned land is on the list for acquisition.
- Open space with wildlife is not adequately identified. For example, Turkey Point Nuclear Power Plan cooling canals are critical nesting habitat for American crocodiles. In addition, much of the area's agricultural lands also serve as habitat for wildlife.

Summary Comments: TRC expectations of What the Watershed Plan Should Accomplish

The TRC Moderator asked the TRC members to summarize in a few short words what they thought the Watershed Plan should accomplish at the end of the day – the critical outcomes. These comments should tie back to the objectives of Land Use Policy 3E of Miami-Dade County's Comprehensive Plan, which the Watershed Study is statutorily required to meet.

The following highlights the TRC members' comments.

"This should be a plan that all the municipalities and the county can use to help implement smart growth practices. It also should be a plan that public officials can fall back on to explain why a proposal is good or inappropriate."

"The plan should provide the end game for development in Miami-Dade County. This is the last of it. We are on the last frontier in South Dade. We can see the end. We need to develop this area a lot better than we did the rest of the county."

"It should be a plan that can be adopted and implemented by the municipalities and agencies, and a plan that development adheres to. If that is done, South Miami-Dade and the county itself will be in better shape."

"The plan should provide an end build-out plan for the county. It should also provide a long-range vision that identifies land for agriculture, for conservation, and for development, and contains recommendations for community character. Those lands that are developed should complement the agricultural and environmental lands. In addition, the process should lead to a consensus as it proceeds, so that there is an agreement on each step, such as the data, before moving to the next step. There should be no surprises at the end."

"A balance should come out of the process that does not lose sight of the need to balance public and private interests, so that the ultimate recommendations are something which public officials can rely on to make meaningful decisions and which can be implemented with the end game in mind."

"There should be a recommended land use plan that balances all aspects of the plan with an eye always toward preserving and protecting Biscayne Bay."

"Drawing from a book on urban planning that describes what a successful plan should provide for, I would like to see the following elements in this plan: a vision of where people want to be, a design that makes sure all the parts fit (the environment, the economy, the public and private interests), an agenda or checklist for what needs to be done, and a strategy for responding to unforeseen circumstances."

"The plan should include a set of action strategies that will maintain water quality in the Bay. Action strategies should address the laws and regulations needed to achieve the plan (to both accommodate development and maintain water quality that would preserve the Bay). They also should provide for the necessary physical design and infrastructure and the financial investment needed to secure the critical land. In addition, the plan should address what it means for land use, the environment, and agriculture."

"My hope for the plan is that it brings back the special qualities that the area had 40 years ago which should be maintained or brought back. Let's talk about what we can do instead of we can't do."

"Biscayne Bay should be the overarching measure. The plan should be characterized in the context of the Bay and the study objectives. I would like to see the natural resources that should be preserved identified and taken off the table. The plan also should identify what infrastructure is needed to grow a sustainable economy within the study area."

"The challenge is to make the plan work on a day-to-day basis when individual land use decisions are made. The plan needs to be creative about mechanisms to preserve natural areas over the long-term, while protecting development rights in the short-term. For example, in addition to acquisition, think about the transfer of development rights and the purchase of canal flow rights."

"The plan should be a true state of the art watershed management plan and a model for the rest of the country. The challenge is to convince authorities to accept an implementation plan that is holistic and comprehensive and that they feel accountable for its implementation. We need to look over the horizon to implementation, which means developing a plan that is so persuasive that it will be implemented and we keep what is important."

Next Steps and Future TRC Meetings

Next Steps

The TRC was given two homework assignments. The first assignment was to send to John Hulsey, the Watershed Study Project Manager, comments on the studies and reports that should be included in this task. These comments should be received by Friday, November 14. The other assignment was to send Hulsey comments on the initial list of thresholds and parameters. This will be due on December 5.

Future TRC Meetings

TRC Moderator Jim Murley confirmed the next two TRC meeting dates: January 30 and July 20, 2004. TRC members are to send in their available dates for the October 2004 meeting.

Public Comments

No public comments were made during the TRC meeting.

APPENDIX A: Participants in Meeting Two of the Technical Review Committee

Technical Review Committee (TRC)

Liz Abbott
Dave Barth
Chuck Blowers
Robert Burchell
David Chin
Tom Daniels
Gerrit Knaap
Joe Kohl
Susan Markley
Steve Nix
Donald Pybas
Edwin J. Stacker
Joel Trexler

Other Meeting Participants

Catanese Center for Urban and Environmental
Patricia Bryk
Angela Grooms
Jim Murley (TRC Moderator)
Jean Scott

Miami-Dade County
Subrata Basu
Antonio Cotarelo
Cindy Dwyer
Victor Martin
Virginia Walsh

South Florida Regional Planning Council
John Hulsey

Keith and Schnars
Juan Carrizo
Michael Davis
Sean Ebersold
Marie Ecton
Samantha Horowitz
Melissa Karlin
Marc LaFerrier
Ian Miller
Michael Phelps
Eric Silva