

SOUTH MIAMI DADE WATERSHED STUDY ADVISORY COMMITTEE
Meeting III

December 13, 2001
MIAMI DADE COMMUNITY COLLEGE/HOMESTEAD CAMPUS
Homestead, Florida
8:00 a.m. - 4:00 p.m.

Report of Proceedings

WELCOME

The meeting was opened by the Facilitator, Janice M. Fleischer, who thanked everyone for coming and explained that the Chair, Roger Carlton, was unable to attend due to an out of town business related commitment. She thanked the Miami Dade AgriCouncil for sponsoring the refreshments for the day and Miami Dade Community College/Homestead Campus for the use of their facilities. She went on to thank Craig Wheeling, Committee member, for volunteering to have Brooks Tropicals be the sponsor for food for the next meeting to be held on January 17 at Metro Zoo.

Members Present:

Ivonne Alexander, Miami Dade AgriCouncil
Richard Alger, South Florida Potato Growers Exchange
Maribel Balbin, South Florida Water Management District
Linda Canzanelli, Biscayne National Park
Carlos Espinosa, Miami Dade DERM
Jeffrey Flanagan, Chamber South
Dick Frost, Tropical Audubon Society
April Gromnicki, National Audubon Society
John Hall, Florida Engineering Society
Louise King, Redland Citizens' Association
Bennie Lovett, Florida City
Blanca Mesa, Sierra Club
Lee Rawlinson, Miami Dade Planning and Zoning Department
Mike Shehadeh, City of Homestead
Charles Thibos, Tropical Everglades Visitor Association
Julia Trevarthen, South Florida Regional Planning Council
Craig Wheeling, Miami Dade Farm Bureau
Dale Williams, Miami Dade Agricultural Practices Board
Tim Williams, Homestead/Florida City Chamber of Commerce

AGENDA REVIEW, DISCUSSION GUIDELINES

Ms. Fleischer reviewed the meeting Objectives and Agenda for the day. The Objectives were:

- ❖ To decide on stakeholder presentations for January meeting
- ❖ To decide on Tour date
- ❖ To have a presentation by Miami Dade Water and Sewer
- ❖ To finalize Goals and Objectives
- ❖ To consider tasks for the Consultant
- ❖ To discuss the Draft Notice to Consultants

A copy of the Objectives and Agenda are attached as Exhibit A.

She reminded Members about their discussion guidelines and encouraged any visitors to make use of the Comment Cards and Idea Parking Lot, and announced that there would be a time for Public Comment immediately after lunch.

UPDATE ON ORDINANCE

The next item was to have a report on the Ordinance establishing the Committee and discuss the changes made by the County Commission. Committee member, Lee Rawlinson, Assistant Director, Miami Dade Planning and Zoning, reported on the Commission decisions. He reminded the members that they had made recommendations for additional stakeholder members to be added to the Ordinance. He explained that, in addition to the draft Ordinance reflecting this Committee's recommendations, on November 27, an alternative Ordinance had been recommended by the Transportation, Infrastructure and Environment Committee of the County Commission that deleted the slot for a Homestead Air Base Developer and added two building industry representatives instead of one as was designated in the original draft. During the public hearing held on December 4, the Board of County Commissioners amended the alternate Ordinance by deleting one of the two building industry representatives. The resulting Ordinance reflects what was approved by the South Miami Dade Watershed Study Advisory Committee, except that the slot for the Air Base Developer has been removed and replaced by a general building industry representative. The new Ordinance is being prepared and will be provided to this Committee as soon as it is ready. County Staff will obtain the names of those individuals who will be representing these additional stakeholders and oversee getting them approved by the County Commission.

STAKEHOLDER PRESENTATION DISCUSSION

The Facilitator then suggested that the Members of the Committee may want to make their own presentations. She suggested that this not be done individually, but rather, in groupings that represent all the Committee stakeholders. She indicated that one hour presentations followed by a half hour for questions would be the maximum time that should be taken by any group. The Members of the Committee would decide which group they would want to participate in and it would be their responsibility to prepare group presentations.

Business, Environment and Community were the three possible categories she suggested. Members expressed the feelings that this would allow the different groups to bring their thoughts together, but that care should be taken to avoid creating divisiveness among the Members. Members' comments in reaction to the idea of Member presentations were:

1. Good idea to get to know each other's concerns
2. Some people should be allowed to make presentation outside broad interest groups
3. Concern about breaking out in groups to stake out territories-Let's put it on the table and decide what we want to hear
4. It isn't splitting up but an opportunity to think together and make our points clear
5. Alternate proposal-brainstorm issue of concern, assign issues to group, assign speaker to issues

Rather than accept the categories suggested by the Facilitator, members suggested that the groupings be decided by first brainstorming ideas for presentations, then grouping the brainstormed ideas. The Facilitator agreed to lead this exercise later in the day and the Agenda was revised accordingly.

TOUR DATE

Cindy Dwyer, Miami Dade Planning and Zoning, and Committee staff, explained that a tour of the Study area was being arranged and would take place February 8, 2002. More information as to details would follow at a later date.

MIAMI DADE WATER AND SEWER PRESENTATION

Jorge S. Rodriguez, P.E., Assistant Director-Water, Miami Dade Water and Sewer, then gave a presentation on plans for new wellfields in the Watershed area. Mr. Rodriguez's presentation is attached as Exhibit B.

The group then took a short break.

GOALS AND OBJECTIVES DISCUSSION

John Hulsey, SFRPC staff, introduced this exercise by explaining how he drafted the document entitled "Potential Objectives for Watershed Plan". He said the Goals came from the Vision Statement and the Objectives were taken from Member comments at previous meetings.

What follows is the text of Mr. Hulsey's document (indicated by regular font) followed by comments by the Members (in italics). This exercise continued through lunchtime.

POTENTIAL OBJECTIVES FOR WATERSHED PLAN

Objectives identified in the Future Land Use Policy 3E:

- A. Identify and protect lands, including their uses and functions, that are essential for preserving the environmental, economic, and community values of Biscayne National Park;
- B. Identify and establish mechanisms for protecting constitutional private property rights of owners of land identified in 3(a) above;
- C. Support a viable, balanced economy including agriculture, recreation, tourism, and urban development in the plan area; and
- D. Assure compatible land uses and zoning decisions in the Study Area consistent with long term objectives for a sustainable South Miami Dade.

-this section needs more of an introductory portion

Goals and Objectives identified by the Advisory Committee:

Goal 1: Vibrant communities with strong identities that achieve environmental, economic and social sustainability.

- this goal needs a verb*
- policies to constrain population growth should be addressed*
- density should be planned effectively with connectivity*
- Consider this goal 1 as an overarching goal which would encompass all the others*
- more objectives suggested by the Consultants should be welcome*

Objectives:

- A. Land set aside for a variety of houses of worship shall be encouraged as part of every local community.
 - should be reworded*
 - ensure land available for community uses in prominent locations*
 - combine this with D to achieve the result desired*
 - public funds should help make community facilities happen*
 - if zoning does not allow these uses, they won't happen*
 - this needs rewording so it is constitutionally sufficient*
 - delete "land set aside for"*
- B. Incentives shall be given to downtown businesses that stay open after 5 p.m.
 - are business incentives necessary?*
 - maybe not only incentives, but tradeoffs and disincentives as well*
 - "incentives" is an important concept, don't lose it (see Homestead as an example)*
- C. Mixed use development shall be encouraged at the centers of communities.
 - create opportunities to encourage community (ensure land design)*
 - a component of the plan should be to look at trade-offs of land uses, land planning tools to direct location and timing of development*
 - look at removing disincentives (no parking, better lighting)*
- D. Public halls and open spaces shall be provided for people to come and gather and communicate.
- E. Sustainable property values as a by-product of vibrant communities shall be a requirement.
 - government should not be required to sustain property values*
 - government action should be responsible for undue impacts*
 - a mechanism is necessary/accountability*
 - change to "...communities shall be 'an objective'"*
 - urban development and urban sprawl needs to be addressed, curtailing population growth*

Goal 2: Honor private property rights

- let's remain open and flexible as we go through the process*
- the Consultant needs to include these concepts in the plan process/how will we pay to keep agriculture?*
- the purpose of the plan is to protect Biscayne Bay in part by preventing urban sprawl/if everyone can agree to mechanism of "fairness" the rest will take place*

Objectives:

- A. The rights of private property owners shall be respected and protected from undue and excessive regulations.
 - the system is already in place, government agencies would determine alternatives
- B. Property owners shall be made whole regardless of what land use decisions are made.
 - who decides what is "whole"
 - compensation process is cumbersome/agricultural problems come from federal practices
 - "shall" is too restrictive
- C. Farmers that do not want to be locked into farming forever shall be compensated or granted the ability to change the uses of their land.
 - eliminate this, it is contained within 2B
 - should read "granted the ability to pursue the change..."
 - "shall" is too restrictive; there should be a showing of negative impact to owner to have compensation
 - don't eliminate it, they are different
 - not comfortable with this because no one has a right to change the use of their land
 - popular point of view, the needs of the land owners vis a vis lenders
 - concern is for "buffer" area farmers not locked in without compensation
 - change of use is not in the purview of the plan
 - protection of property rights is contained in Land Use Element 3E Objectives
 - wording of this needs to reflect that whatever process is used follows the proper channels

Goal 3: Support economically diverse agriculture

- need to address the recommendations in the Ag Study
- the need to protect the viability of agriculture should be recognized
- is the power of the SFWMD a result of water policy?

Objectives:

- A. Tax rates for agricultural use land in Miami Dade shall reflect the value of the present use.
- B. An organization shall be established to promote a major marketing campaign for Miami Dade agricultural products by 20xx.
 - "country of origin" is a better way to accomplish this goal
 - this item should be combined with F
 - needs local revenue source like the gas tax (strike "organization shall be established" and add "a mechanism for funding and distribution")
 - add agritourism
- C. Development regulations and public projects shall ensure a profitable and healthy cohabitation between agriculture, urban areas, the environment and the parks.
 - this should be moved to Goal 1
- D. The community shall agree to acceptable water quality/quantity standards for all.
- E. Flood events that damage agriculture shall be reduced or eliminated by 20xx.
 - we don't have the power to reduce flood events
 - reduction is a good policy
 - this belongs under Goal 7
- F. Agricultural investments shall earn a high enough return to induce farmers/investors to continue to invest given market and weather risk.
 - we have no control over farmers
 - constraints to be considered
- G. Agriculture shall have flexibility to meet changing world and area conditions.
- H. Agriculture as a business, as opposed to a hobby, shall be sustained and profitable.

Goal 4: Ensure a healthy and sustainable Biscayne Bay and Biscayne and Everglades National Parks

- need the objectives to be consistent with Park plans
- look at the objectives at the Federal level and get input from Park executives (Linda)

Objectives:

- A. The needs of the environment shall be balanced with flood protection.
 - add "to adjacent areas"
- B. South Miami Dade shall have a natural resource based economy.
 - move to Goal 1
 - move this to another, less specific Goal, it can be confusing under this Goal
 - "shall" is not necessary
- C. Park attendance to both Biscayne and Everglades National Parks shall be increased to and sustained at xxx levels by 20xx.
 - capture existing tourist dollars in H rather than here
 - this is the same as N
 - they are not the same, 4N is a good indicator
 - this is an outcome, not a goal, why are we encouraging more attendance?
- D. Use of lands essential for health of Biscayne Bay and Biscayne National Park shall contribute to their sustainability.
 - define lands needed for Biscayne Bay
 - there needs to be a land use plan
- E. Clean fresh water shall be available for residents and the environment.
- F. Water discharges to Biscayne Bay: quality, quantity, timing and distribution shall be compatible with a healthy Biscayne Bay.
 - expand to Biscayne National Park
- G. Land uses in the watershed shall not compromise clean air and water.
- H. The South Miami Dade Watershed Plan shall contribute to the Everglades Restoration Plan.
 - the South Florida Ecosystem Restoration is more comprehensive than the Everglades Plan, use it instead of Everglades Restoration
- I. The full potential of the national parks to be pillars of local economy shall be realized.
- J. Programs to encourage conservation as part of the culture of south Dade community shall be implemented by 20xx.
 - money available now SDS and WCD, also in CERP
- K. Water quality targets by definition of sustainable urban development and outlining water quality components of sustainable urban development shall be determined and utilized.
 - quantity and quality for sustainable environment
- L. Land use decisions shall be compatible with healthy future of national parks and bay.
- M. Restoration of the South Dade, Everglades, Biscayne Bay environment shall continue.
- N. Fish size and reef size shall be restored to xx by 20xx.
 - we need measurability like this for agriculture objectives
- O. Quality of resources in Biscayne and Everglades National Parks shall be restored to those that existed in the year 19xx by the year 20xx.
 - someone at the park has an idea, this should be defined before it goes to the Consultant
- P. Natural resources such as wildlife and plant habitat and terrestrial features shall be enhanced.
- Q. The objectives in Land Use Element 3E shall be met.

- R. Existing wetlands shall be protected.
 - new wetlands need to be re-established adjacent to Biscayne National Park (along the coastal wetland area) and those need to be protected
 - historic wetlands should have been considered
 - need to define what is meant by "important wetlands"
 - the definition of what constitutes a "wetland" is not certain
 - all wetlands are important, who decides? We shouldn't make this determination
- S. Ground water quality shall be maintained and enhanced using xx parameters by 20xx.
 - Consultant should confer with park people for their ideas and input
- T. Spatial extent of wetlands shall be increased where appropriate to help with flooding/clean water issues.
 - add " and to restore natural freshwater flow to Biscayne National Park and Biscayne Bay"

Goal 5: Promote open space and tourism and recreational facilities based on natural wonders

- promote entire region as destination area as opposed to just the national parks
- promote this area as "the gateway to Everglades National Park"
- add something about agritourism
- the vision for agritourism is constrained by liability/the consultant should look at the feasibility of agritourism when one considers liability items such as chemical spraying, and other activities which could potentially cause harm to those visiting
- Farm Credit Bureau defines farming as "living in a rural area and farming"

Objectives:

- A. Park attendance to both Biscayne and Everglades National parks shall be increased and maintained at sustainable levels.
 - change "increased" to "encouraged"
 - make them a "Destination Area"
- B. A program for land banking by government creating open spaces shall be established by 20xx.
 - remove the word "government"
- C. Additional parks shall be created where appropriate, at a level of service of xx acres per 1,000 residents.

Goal 6: Welcome other compatible enterprises

Objectives:

- A. Businesses and industries that are compatible with clean air and water and a natural resource based economy shall be encouraged before others.
- B. All types of jobs, high tech to service oriented, shall be created to meet the communities' needs.
 - this needs to be made more clear
- C. Employers shall be encouraged to match work with the labor force and trip lengths.
- D. Diverse economic opportunities that don't degrade the environment shall be created.

Goal 7: Sustainable urban development

- what does this goal mean?is this the right wording?
- combine this Goal with Goal 1
- however, you may not want to lose the ability to break it down
- urban development to meet population projections/future community needs
- missing incentive based initiatives

Objectives:

- A. Appropriate land uses on lands essential for health of Biscayne Bay and Biscayne National park shall be ensured.
 - add South Florida Ecosystem Restoration Plan
- B. Mixed use centers that enable people to live, work, and play within walking distance or short transit ride shall be created.
 - should stand alone
 - urban development is not our goal, it may be incompatible with Biscayne Bay
- C. Housing and infrastructure to meet community needs shall be provided.
- D. Water quality components of sustainable urban development shall be determined.
- E. A healthy, diverse, and sustainable economy that does not rely on urban development boundary expansion shall be established.
 - looking at making existing urban development sustainable
- F. Urban sprawl shall be controlled to assist protecting agriculture as an industry.
 - add "and environmentally sensitive lands and open space"
 - remove "as an industry", not distinguishable
 - "industry" is different from "hobby"
 - some people consider 5 acre part time farms as urban sprawl, the IRS defines farming as getting 50% or more of your income from farming, regardless of size of the farm
- G. Ground water quality for residential uses shall be maintained.
- H. Impacts on schools shall be considered with all development decisions.
- I. Wastewater reuse technology in South Dade shall be encouraged where economically feasible.
 - add "and environmentally sound"

Goal 8: Preserve historic quality and rural character with a strong sense of local community and stewardship

- Miami Dade County Historic Preservation Office
- have them do a presentation or submit a report
- endangered sites-archeological

Objectives:

- A. Historic conservation as part of the culture of South Miami Dade community shall be encouraged.
- B. South Miami Dade shall maintain a sense of time and place and community.
- C. Community design shall be an integral part of preserving historic and rural character.

- D. Factors that make this area uniquely rural and historic shall be preserved and maintained-
such as:
- a. Cauley Square
 - b. Anderson Corners
 - c. Redlands Hotel
 - d. Last Chance Saloon
- need a more comprehensive list if you use a list, real goal is to identify those areas, this is not an all inclusive list*
- E. A well developed plan and architecture standards shall be utilized.
- incentives would work better*
 - or add "to commercial uses"*
 - add "community generated"*
 - thematic concepts/generate ideas*
 - architectural standards should refer to commercial and industrial, not residential*
- F. The plan shall be compatible with Homestead developing historical districts.
- G. Urban development shall be balanced with buffer areas, so real rural character, not just the
"feel" of rural character is maintained.

PUBLIC COMMENT

Immediately following the Goals and Objectives exercise, time was allowed for Public Comment. Mr. Lloyd Miller spoke to the group about ensuring there is coordination with other groups working on topics that either impact or are related to the work of this Committee. Mr. Miller brought copies of the Biscayne Bay Regional Restoration Coordination Team Charter for the Members. This document had already been provided to the Committee and is attached to the September 26 Report as Exhibit F.

STAKEHOLDER PRESENTATION DISCUSSION CONTINUED

At this point, the Facilitator had the group return to their earlier discussion regarding Member presentations. Members were given post it notes in order to "brainstorm" presentation thoughts and comments. All notes were posted on the wall and Members were then instructed to read through all the notes and put them in natural groupings. The three categories which emerged were: Economy, Environment and Community. Members were asked to put their names on the flipchart sheets indicating which group they would like to be in to prepare presentations in that category. The contents of the post it notes and the Members who signed up are shown below:

CATEGORIES AND COMMENTS

COMMUNITY

1. Redland Citizen Association/Redland Incorporation/Agriculture- its many faces
2. County commitment to this process and what commitment is there really, Manager Shiver
3. Zoning of South Miami Dade
4. Historic preservation
5. Municipal Expansion Plan and future initiatives
6. Miami Dade County planning for the future
7. Vision Councils of local communities

8. Impact of flooding on south Dade
9. Park's view of South Dade in 50 years
10. Development in the NIHB? Twenty-first century and how can it resolve environment vs. man issues.
11. Higher density? Prevent urban sprawl? Planning dept.

Members on this presentation committee:

- Lee Rawlinson
- Louise King
- Jeff Flanagan
- Dale Williams
- Maribel Balbin

ENVIRONMENT

1. National Park Service vision for the future.
2. Hydrology of South Florida/South Dade/ Bob Johnson?
3. Biscayne National Park protection and objectives.
4. Presentation from Biscayne National Park.
5. Working Group Biscayne Bay Committee: Maribel (Balbin), Julia (Trevvarthen), et.al.
6. Conservation easements.
7. Water quality, feasibility study (DEP).
8. Projects in Biscayne National Park re: South Florida Ecosystem Restoration.
9. Local governments points of view/challenges as they relate to this Committee.
10. Restoration Taylor Slough and other historic wetlands.

Members on this presentation committee:

- Linda Canzanelli
- Mike Shehadeh
- Dick Frost
- Carlos Espinosa
- April Gromnicki
- Daniel Apt

ECONOMY

1. Don Pybas, Extension Service/Agriculture in South Dade.- the picture of agriculture today and tomorrow.
2. Paul DiMare, etc. agriculture reality check.
3. Flooding.
4. Empowerment Zone Trust/South Dade Zones.
5. Chambers of Commerce.
6. Agriculture Retention Study.
7. Agritourism
8. Transfer of development rights.
9. Economic and regulatory challenges to South Dade agriculture.
10. Ecotourism
11. HARB redevelopment
12. "Real" Economy of Homestead/Florida City or what's really happening in Vision Council.

13. What is the potential for a greater contribution to the South Dade economy by increasing the tourism market?
14. Conservation easements.
15. Tourism-economic impact on the area.
16. Property rights? How can we plan with respect for them? How do you quantify? County attorney?
17. Rural and Family lands Protection Act
18. Agricultural trends in South Florida
19. AgriCouncil
20. Conflicts encountered by agriculture.
21. Agriculture retention programs "land bank" programs, i.e. Palm Beach
22. Top 3 challenges facing agriculture.
23. Agriculture retention programs, who, what, where, when and do they work? Funding?

Members on this presentation committee:

Blanca Mesa
 Richard Alger
 Ivonne Alexander
 Tim Williams
 Bennie Lovett
 Charles Thibos
 Craig Wheeling

Other thoughts presented:

1. Review of water management plans from other areas.
2. South Florida Water Management District, what are you doing with the billions of dollars?
3. Other competing/compatible local studies.

It was agreed these groups would organize themselves and prepare presentations to be delivered at the next meeting of the Committee. The next meeting date of January 17, 2002 was going to conflict with several members schedules. The date was changed by consensus to January 23, 2002 and will be held at the Miami Metro Zoo.

TASKS FOR CONSULTANTS

Once again, John Hulsey explained how he drafted this document. Mr. Rawlinson also explained the funding and resources for the Study and presented a table attached as Exhibit C.

Mr. Hulsey suggested the Members make comment first on sections C and D, then go on to Sections E and F; leaving Sections A & B out for the day due to time. Any comments on A and B could be emailed to Mr. Hulsey. Mr. Hulsey's document text is reproduced below in regular font and Member comments are shown in italics.

SOUTH MIAMI-DADE WATERSHED STUDY DRAFT CONSULTANT TASKS

Those identified by the Advisory Committee in previous meetings:

1. Identify the best use for all land areas
2. ensure decisions enhance instead of detract from property value
3. Project expected 2020 and 2050 area agricultural land requirements...develop alternative land use plans (environmental boundaries, compatible rural development, urban, etc.)
4. our task is to take data and further refine it
5. develop best land uses by coming up with a plan
6. agriculture needs flexibility to meet changing world and area conditions
7. How to regulate water without destroying agriculture.
8. Drought conditions and the water table; preserving agricultural industry beyond profitability
9. The timing and distribution of water supply for agriculture.
10. Impacts of large land uses on water quality.
11. Set water quality targets for south Biscayne Bay, for a defined set of parameters
identify lands essential to the health of south Biscayne Bay and Biscayne National Park
12. Determine and make full use of potential of national parks as pillars of local economy
13. Defining water quality standards is how we get to a healthier parks
14. Developing a scientific basis to identify land to be conserved for Biscayne National Park
protection and establishing a realistic funding mechanism.
15. Outline what compatible enterprises are appropriate for the South Miami -Dade Watershed
16. Providing infrastructure an issue? First need to decide on land use
17. Limited urban growth (via zoning regulations)
18. Project expected 2020 and 2050 area agricultural land requirements...develop alternative land use plans (environmental boundaries, compatible rural development, urban, etc.)
19. Achieve set water quality targets by definition of sustainable urban development and
outlining water quality components of sustainable urban development
20. How will we meet future housing needed given NIMBY (Not In My Backyard) attitude/
County plan?
21. What makes this area different from other areas of South Florida
22. Look at incentives and encouragement
23. Current conditions
24. Impact of planned projects
25. Balance flooding/quality/distribution/timing and supply of water
26. This applies to all land uses: agriculture, residential, parks
27. Articulate the elements of a 50-100 year vision.
28. Stormwater runoff impacts/tied to population increases and land use changes.
29. Financing alternatives.
30. Who is responsible for maintaining canals?
31. Define the difference between a drainage ditch and a SFWMD canal.
32. Who is needed for implementation to take place?
33. Getting people to listen to the "locals".
34. Being aware of outside forces.
35. Coordination with ongoing projects (e.g. Miami Dade Flooding Study, CERP, MWD, C-111, etc.)

Objectives identified in Future Land Use Policy 3E:

- identify and protect lands, including their uses and functions, that are essential for preserving the environmental, economic, and community values of Biscayne National Park;
- identify and establish mechanisms for protecting constitutional private property rights of owners of land identified in 3(a) above;
- support a viable, balanced economy including agriculture, recreation, tourism, and urban development in the plan area; and
- assure compatible land uses and zoning decisions in the Study Area consistent with long term objectives for a sustainable South Miami-Dade

Specific tasks identified in a Draft Scope of Work:

A. Watershed Description/Data Collection

The purpose of this section is to provide a detailed description of the range of watershed features and characteristics that are relevant to the purview of this plan. It is acknowledged that in addition to a description of these features and characteristics, analyses of future trends and of how these features impact the watershed will be performed. Specific areas of analysis shall include, where applicable, but not be limited to the impacts of these features/characteristics on: air quality; economic sectors; employment; income; levels of investment; the tax base; economic competitiveness at the local, national, and international levels; land values; pollutant loading (point and non-point source); natural communities; quality of life (schools, crime, transportation, adequacy of public services, congestion...); solid waste (generation, management, disposal); stormwater management; wastewater management; and water consumption. Specific watershed characteristics and features to be described and analyzed shall include but not be limited to:

1. Natural Features

A description of the natural features of the watershed, including, but not limited to:

- a. Climatic Conditions
- b. Soil Types
- c. Topography (land elevation)
- d. Undisturbed open lands
- e. Uplands
- f. Wetlands

2. Watershed Hydrology

A description of the watershed's hydrological features, the interrelationships between these features, and relationships with other features of the watershed. Specific features/impacts to be examined shall include, but not be limited to:

- a. Major water bodies (Biscayne Bay, canals, groundwater, wetlands, Biscayne Aquifer)
- b. Uses, classifications and standards for major water bodies
- c. Biscayne Bay hydrodynamics and freshwater needs
- d. Canal control structure operating rules and hydraulic capacity
- e. Canal conveyance capacity

- f. Canal system flows
- g. Flood zones and flood protection levels of service
- h. Groundwater table elevations and flows
- i. Pollutant loading
- j. Rainfall
- k. Saltwater intrusion front
- l. Water quality assimilation processes/capacities (i.e. how Biscayne Bay assimilates impacts from canal discharges, rainfall contaminants, use impacts)
- m. Pollution abatement
- n. Drinking water supply

3. Vegetative and wildlife resources

A description of the watershed's vegetative and wildlife resources, including, but not limited to:

- a. The description of natural communities, and lands that function in support of natural communities
- b. The identification of key indicator species (species that may be used to gauge impacts)
- c. Listed species
- d. Carrying Capacity of watershed for natural communities
- e. Invasive exotic species

4. Population and demographics

Utilizing projections provided by the Miami-Dade Department of Planning and Zoning, provide population and housing characteristics for 1980, 1990, and 2000, etc., including:

- a. Total population
- b. Age groups 0-17, 18-64, 65+
- c. Total housing units
- d. Tenure
- e. Occupancy
- f. Single-family/multi-family split

Projections of the above for 2010, 2025, 2050. Where appropriate, analyze:

- g. Relationships between described population/demographic characteristics and other watershed features
- h. Watershed impacts resulting or anticipated to result from the existing and projected population

5. Human Systems

Utilize the best information available to detail the following human system indicators in the watershed:

- a. Households below poverty level (number and percentage)
- b. Owner-occupied households with a housing cost burden at or greater than 30% of monthly income (number and percent)
- c. Renter-occupied households with a housing cost burden at or greater than 30% of monthly income (number and percent)

- d. Violent crimes per 1,000 residents
- e. Juvenile arrest rate
- f. Percent over 18 with high school diploma
- g. Percent speak language other than English at home
- h. Infant mortality rate per 1,000 live births
- i. Births to mother under 19 years per live births
- j. Percent voter turnout in past national election.

6. Development Features

A description of existing land uses, management practices, and land coverage characteristics (i.e. % of impervious surfaces, % of tree canopy) in the watershed. Specific uses, practices, and features to be described/analyzed shall include, but not be limited to:

- a. Residential
- b. Industrial
- c. Commercial
- d. Public and Private Institutions and Facilities (including HARB)
- e. Parks and Recreation (public and private)
- f. Agriculture (by crop type, growing practice)
- g. Environmentally protected lands
- h. Disturbed open lands (includes inactive farmland)
- i. Infrastructure (i.e. roadway system, canal system, potable water lines, sewer lines, area on septic, area on private wells)
- j. Mines

7. Economic Base Analysis

-put in a place holder here for information on agriculture, ask for something greater if the Ag Retention Study is not adequate

The watershed's economic base will be described and analyzed, including these existing and projected economic indicators:

- a. Employment
- b. Income and associated multiplier effects
- c. Economic growth and development
- d. Economic competitiveness of the area at the local, national, and international levels
- e. Public and private investment in the watershed
- f. Tax base

Further, analyze the impacts of specific economic activities on the watershed, including their contribution to the economy. These activities shall include but not be limited to:

- g. Agriculture
- h. Mining
- i. Construction
- j. Manufacturing
- k. Transportation and public utilities
- l. Trade
- m. Finance, Insurance, and Real Estate
- n. Services
- o. Public sector (including schools)

These sectors should be quantified in terms of employment and land use acres for 1980, 1990, 2000, projected for 2010, 2025, 2050.

8. Description of regulatory and planning agency jurisdictions

Public agencies and entities having regulatory and/or planning jurisdiction within the watershed, and the extent of their jurisdiction, will be described. Further, outline and describe all relevant federal, state and local planning efforts/initiatives that impact the watershed, and how these efforts will affect the plan. Finally, outline and describe all applicable laws and regulations (federal, state, and local) that will affect development in the watershed.

9. Land ownership characteristics

Major land ownership characteristics and trends within the watershed (i.e. vacant land ownership, public ownership, large parcel ownership, absentee owners) will be described.

10. Existing development potential

The existing development potential of the watershed will be quantified based on current ownership patterns and in-place development regulations (i.e. CDMP, zoning regulations, environmental restrictions).

B. Identify Issues Affecting Plan Development

Identify and describe key issues that have served as a catalyst for, will be raised by, and/or that will act as an impediment to the development and implementation of the plan. These issues may include: impacts resulting from interactions between the various land uses, management practices, and natural/hydrologic features of the watershed; unintended consequences of taking particular actions; competing needs; conflicting goals; information gaps; and other issues as appropriate. This activity shall include the review of recommendations from other relevant planning activities. In particular, review all projects proposed in the CERP that are located in or will affect the watershed, and consider their potential impacts. Specific areas of focus shall include, but not be limited to:

1. Economic viability

An examination of issues pertaining to the economic viability of the watershed, and how this may be affected by the plan, including:

- a. The continued viability of the various economic sectors (agriculture, tourism, retail, etc.)
- b. Impacts on existing economic objectives
- c. Conflicts between efforts to recover from the negative economic impacts of natural disasters, public policies, and private competition
- d. Description of forces and trends influencing the watershed's economy
- e. Impediments to economic development
- f. Employment and unemployment

2. Flood Protection

An examination of issues pertaining to, affected by, or affecting flood protection in the watershed, including, but not limited to:

- a. Ability of the existing canal system to provide future flood protection
- b. Affects of canal discharges on Biscayne Bay
- c. Natural system vs. urban vs. agriculture needs

3. Population growth

An examination of issues pertaining to, affected by, or affecting population growth in the watershed, including but not limited to:

- a. Additional demands on resources
- b. Affects on efforts to achieve sustainable development
- c. Infrastructure needs
- d. immigration policies

4. Property Rights

An examination of the issue of property rights, and how these rights might be affected by the plan, including but not limited to:

- a. Affects on land acquisition programs
- b. Competing public interests (e.g. flood protection vs. water conservation)
- c. Methods of just compensation
- d. Legal implications of takings or moratoria
- e. Reasonable investment backed expectations
- f. Land preservation/protection
- g. Impacts of land use decisions and preservation/development initiatives on property values
- h. Loss of existing uses
- i. Affects of asset base of land owners

5. Quality of life

An examination of issues including but not limited to:

- a. Accommodating growth vs. congestion
- b. Developing a coordinated vision for the Study Area
- c. Crime/public safety
- d. Public health
- e. Infrastructure capacity
- f. Impacts of development on existing and future agricultural activities

6. Regulatory

An examination of regulatory issues related to achieving the objectives of the plan, including but not limited to:

- a. Disincentives or conflicting regulations
- b. Regulatory barriers to implementation
- c. Resulting financial responsibilities
- d. Superseding regulatory framework on development

7. Soil, Sediment and Air Quality

Examination of issues pertaining to, affected by, or affecting soil, sediment and air quality in the watershed.

8. Water quality

An examination of water quality issues including but not limited to:

- a. Adequacy of standards to measure impacts
- b. Existing and projected water quality impacts on natural systems
- c. Pollutant loading
- d. Water quality standard enforcement
- e. Pollution control and abatement

9. Water supply

An examination of water supply issues including but not limited to:

- a. Ability to meet future demands
- b. Saltwater intrusion control
- c. Competition among users (including National Parks' needs)
- d. Wastewater/stormwater reuse
- e. Aquifer storage and recovery

C. Formulate and Analyze Test Scenarios (2050)

- "need" economics of the Ag Study should be considered*
- work product indicating economic viability of agriculture*
- Phase the Scope of Work that way you can change or evaluate consultants as you go*

Population projections will be utilized to formulate a variety of development scenarios for 2050. Modeling techniques will be used to project the impacts of development according to these scenarios on the various components of the watershed described in Part A. The information gathered in these preliminary scenarios will be used in an iterative fashion to indicate the costs and benefits of plan alternatives for future development and conservation in the watershed. The scenarios include, but are not limited to:

1. An "unconstrained" scenario projecting buildout based on the residential and associated development demanded by projected population growth without regard to development regulations and growth management initiatives (i.e. CDMP, UDB, Eastward Ho!)
2. A "status quo" scenario projecting buildout based on what is currently allowed in the CDMP and LDRs assuming no policy changes.
3. A "constrained" scenario assuming the conservation of all land necessary to prevent any negative impacts to the natural systems and to preserve existing agricultural uses.

- include a "no growth" scenario to cover the full spectrum*
- need a limited number of rational alternatives rather than including unrealistic scenarios*
- think about policy considerations: broad perspectives/realistic*
- be very general, let consultants determine scenarios*

D. Formulate Alternative Actions

- be careful using cost/benefit ratio/ don't want to imply selected methods will not be based primarily on that*
- like the section but think it should be phased*
- deliverables will be tools that are used*
- does the Consultant decide or is the Consultant directed?*
- allow increased development where appropriate-consultants should be tasked with looking at stopping development as well as increasing it*

A series of alternative actions that might be implemented in the watershed in order to achieve the objectives of the plan will be considered. A full cost/benefit approach will be used to ensure that all potential consequences (positive and negative) of implementing a particular action are understood and expressed. Describe the methodology used to ascribe economic values to non-market resources (e.g. open space, natural features) in determining costs and benefits. This component of the study will result in a menu of alternatives for possible inclusion as recommendations in the final plan. Funding sources/mechanisms for implementation of these alternatives will be identified. Alternative shall include actions to achieve plan objectives, and mitigate negative consequences resulting from implementation. Alternatives may include, but are not limited to:

1. Best Management Practices (BMPs) for each land use
2. Capital improvements
3. Economic incentives
4. Incentives to promote those land uses or patterns thereof identified as desirable by the community that also further plan objectives
5. Innovative development concepts, including those that minimize the impacts of development on natural resources
6. Land management strategies, including but not limited to:
 - a. Land acquisition programs
 - b. Land trusts
 - c. Transfers of development rights
 - d. Conservation easements
 - e. Land assembly and development consortia
7. Pollution abatement strategies
8. Regulatory/policy changes (e.g. CDMP amendments, zoning changes)
9. Water management options/plans
 - a. Changes to the canal system/discharges
 - b. Flood protection
 - c. Hydrologic restoration/enhancement
 - d. Appropriate freshwater inputs to Biscayne Bay (quality/quantity/timing/distribution)
 - e. Water supply alternatives
 - f. Stormwater/wastewater disposal/treatment/reuse

E. Utilize Alternative Actions to Formulate and Analyze Future Development Scenarios

- problem with lots of different groups with lots of ideas-how do you get consensus at the end of the day?*

Continuing iterations of future development scenarios utilizing a variety of the actions described in D will be evaluated, comparing positive and negative impacts, costs and benefits, and achievement of the plan objectives. The resulting preferred alternative will be the basis of recommendations in the plan's report.

F. Watershed Plan Report

-this is where phasing might be the most appropriate
-there is an evaluation time between study and formulation of the plan

Based upon D. and E. above, a series of specific actions to achieve the objectives of the plan will be recommended for implementation by 2010 and 2025. Plan components and objectives might include but are not limited to:

1. The development and statement of specific goals and objectives
2. The description of other studies and planning efforts relevant to the watershed, and how they relate to this plan
3. The description of actions recommended for implementation in the watershed, based on alternative actions evaluated in D., including specific actions to be taken by 2010 and 2025, and direction for achieving plan objectives for 2050
4. The development of a general long-range watershed development/preservation plan for 2050
5. The description of existing or proposed monitoring and/or evaluation efforts that could be used to measure the achievement of plan goals and objectives
6. The establishment of plan milestones, and a strategy for the periodic reevaluation and update of the plan
7. Review of the draft plan with all participants, stakeholders and other interested parties.

CLOSING AND ADJOURNMENT

Ms. Fleischer thanked the Committee for working very hard during this day and reminded the members to complete their evaluations and turn them in before they left.

The meeting was then adjourned.