Indirect and Cumulative Effects Task Group
Natural Resource Effects Sub-Group
May 2-3, 2006

FDOT District Five Urban Office
Orlando, Florida

Attendees:
Larry Barfield, FDOT CEMO
George Hadley, FHWA
Makayah Royal, FHWA
Dick Combs, FDOT
Alexis Thomas, GeoPlan Center
Joe Walsh, FWC
John Wrublik, USFWS
Joy Giddens, FDOT D3
Jason Spinning, ACOE
Bob Barron, ACOE
Josh Boan, FDOT CEMO
Chris Stahl, FDEP
Patrick Webster, SRWMD
Fred Gaines, Turnpike Enterprise
Madolyn Dominy, EPA
Mark Schulz, FDOT D1
Lauren Milligan, FDEP
Dave Rydene, NMFS
Anthony Miller, SJRWMD
Donna Curtis, SJRWMD
Frank Kalpakis, Ruth Roaza, Mark, Easley, Erin Degutis – URS Corporation

Meeting agenda and handouts provided under separate cover.

The meeting commenced at approximately 1:30 pm.

Welcome and Introductions
Larry Barfield welcomed the Natural Resource Effects Sub-Group and thanked members for their continued participation. He stated that the overall objective was to continue our work from the March Full Meeting and April Sub-group Group meeting with a focus on how we will conduct cumulative effects evaluations from the perspective of natural resources.

Process Review
Frank Kalpakis discussed a sample project with potential cumulative effects, "Erin Road" in a PowerPoint presentation. He described how cumulative effects evaluation would be conducted from the perspective of a defined natural resource area. The defined natural resource was a wetland system that would be impacted by past, present, and proposed transportation and land use actions in the area.

Data Sets
There are existing data sets on the tool that could be utilized for the cumulative effects evaluation. There are also "off-line" data and information that is useful to support ICE evaluations. The location of off-line data needs to be identified and links could be established within the EST to direct users to this information.

The white paper will include a list of the data sets desired, but not presently on the EST. Later, we will establish priority for including these data sets on the EST. Data availability, maintenance requirements, cost, etc. are all factors that are considered for uploading the data on the EST.

ETAT or ETDM Coordinators could go to local governments to acquire local permit information, including acreage permitted (present, historical). SWFWMD has permit records with an assessment based on acres/wetlands permitted.

The ACOE is developing a new database and experiencing some growing pains with maintaining the information. Presently, they can regenerate point data, which can also be added or deleted. Geographic coverage includes the entire State of Florida. Data is not tied to species habitat. The new database includes data since October 2003 and some prior data exists on large projects.

FLUUCS data would be useful for the trend analyses. Wildlife data may be the most extensive data sets.

Analysis Process
The group reviewed the "Proposed Cumulative Effects Evaluation Process" flow chart. The first two steps were understood and accepted.

Step 3: Review Information to Support Evaluation: Information that could be utilized for natural resource cumulative effects analysis could include: historic aerial photo interpretation, trend analysis based on land use / FLUCCS, 1995 aerial photography from the ACOE, WMDs aerial photography from 1990, and USGS land use information from 1970 (however, it is coarse with less certainty – not level 3). Later layers are more accurate and detailed.

Step 4: Identify Resources of Concern: Agencies could use existing data to define the area of potential effect. The group discussed that priority sets need to be identified and acquired. Each agency will submit needed data sets to Frank Kalpakis and Alexis Thomas.

Step 5: Determine Area of Effect and Document Rationale: The group discussed the Scrub jay example and evaluating the species on a countywide basis as well as the meta-population. Permits granted for Scrub jays would be useful.

The defined resource area and analysis could be linked to several projects within the county or in other counties. Resource areas could be broader than the county: the watershed or another large geographic feature (Southwest basin, Everglades, or Water Management District). Different resources have different natural boundaries and the scale of the assessment may change. The

regulatory agencies should define the resource area boundaries and identify the supporting data sets to determine the resource area. ACOE indicated that they could digitize the resource areas.

Step 6: Review Standard Analyses: The group discussed scheduling a conference call for the sub-group to identify standard analyses for water issues and wildlife and habitat issues. The group will provide needed data sets and desired standard analyses.

The FFWCC suggested that they could provide quantitative information of acres impacted. Their new model evaluates land use data.

Step 7: Review Previous Project Direct & Indirect Effects Evaluations: The group discussed having a new way to query information in the screening tool as well as automating results of direct/indirect effects into a summary report that could be used for cumulative effects analysis.

Step 8: Review Off-line Resources: Involve agency GIS people to identify resource and discuss with Ruth Roaza and Alexis Thomas. The EPA has a smart growth group that includes GIS and their input could be helpful. Agencies should submit off-line resources that are useful to cumulative effects evaluation to Frank Kalpakis.

The SJRWMD uses off-line analysis for cumulative effects to wetlands. ACOE uses UMAM scores and FLUCCS wildlife scores.

Step 9: Evaluate Cumulative Effects to Resource: The group discussed describing the carrying capacity of resources. Examples would be no net loss of wetlands and water quality meeting water quality standards. The cumulative effects analysis would consider effects of development, growth plans, and other development on wetlands and water quality.

Step 10: Provide Commentary on Cumulative Effects to Resource or Concern: Commentary should include current state of resource, carrying capacity of resource, trend analysis, and analysis of potential cumulative effects to the resource. The recommendations of the reviewer should carry forward to the NEPA document.

Step 11: Assign Degree of Effect: The group discussed that a degree of effect to resource needs to be assigned for each cumulative effects evaluation and that agencies need to generate criteria for each. Also, each agency should determine their thresholds for impacts to a resource. The degree of effect at the planning stage should be assigned for all actions on the resource. (Not to the project – but all actions.)

Step 12: Produce Summary Report: The following components were identified for the Cumulative Effects Summary Report

1) Quantitative data (Standard analyses results)
2) Definition of resource, assessment area rationale
3) Current state of resource
4) Carrying capacity, indices of biological integrity (how much of a loss can be sustained by the resource?)
5) Analysis / Commentary

6) Recommended actions by DOT or other entity

Analysis Responsibility

The group discussed designating who would be doing the analysis on each resource. They suggested that we could benefit from multiple agencies reviewing certain issues. For example, the DEP/EPA evaluates the same resource differently based on their rules for wetlands.

Pilot Project
The group discussed utilizing a heavily developed area as a pilot project for the cumulative effects analysis. A baseline condition would be established and each agency would participate.

Environmental Screening Tool Notes
- Need to be able to identify resource areas with options to digitize and upload existing data layers or derive.
- Users need to be able to select a resource area and select project and ETAT commentary on projects within a resource area or a distance from a selected project.
- Send notice when data updates are received from agencies.
- Part of commentary is to identify carrying capacity and how much loss can be sustained.
- History retained: when a new project comes up, bring up previous commentary of resources.
- See agency responses to questions for preliminary data sets and analyses: more will be determined through teleconferences during week of June 5.

Environmental Screening Tool Questions

1. Can the area of effect be digitized in the EST? Are there data sets that are not on the EST that would be helpful in defining the area of effect?
   Yes. The area of effect can be digitized in the EST. There are data sets that can be acquired from other sources and be useful in determining the area of effect. An example is the permit records for wetland impacts issued by the water management district or the ACOE.

2. How often should data derived from sources without Agency Operating Agreements be updated?
   The threshold or timeframe to update the data should be established after the pilot project.

Assignments Formatted

- EPA to send Frank Kalpakis information on the geographic boundaries techniques and analysis.
- Sub-group members to send the names of priority data sets and desired standard analyses by May 18th.
- Conference calls for water issues and wildlife/habitat issues to be scheduled by Frank Kalpakis for the sub-group to discuss and identify data sets needed to

support cumulative effects evaluations and supporting standardized GIS analyses that could be performed on the EST.