Proposed Review Process for the Northern Tampa Bay Phase II Program and Minimum Flows and Levels Methodologies

In 1999, the District initiated the Northern Tampa Bay Phase II program (NTB II) as a follow-up to the Northern Tampa Bay Water Resources Assessment Project and the initial development of Minimum Flows and Levels. Through a series of projects, this program will continue assessments of the biologic and hydrologic systems in Northern Tampa Bay to support the ongoing development of minimum flows and levels, water resources recovery, water use permitting, and environmental resource permitting. A draft scope of work for the program was presented to the Governing Board in January 2000, and has subsequently been distributed to the public for review. The scope of work will be reviewed and updated annually.

The NTB II Scope of Work includes projects directly in support of Minimum Flows and Levels (MFLs), as well as a variety of projects that will either indirectly support MFLs, or support other District initiatives. Because of the importance of the results of these studies, it is desirable to assure adequate quality control, scientific peer review, and public input to the NTB II program. Toward this goal, requirements from both Florida Statutes and the Florida Administrative Code must be considered.

Chapter 373 FS requires that the District develop a priority list of watercourses, aquifers, and waterbodies for which MFLs will be established, and requires that the District update the list annually. The Statute also states that the "priority list shall also identify those water bodies for which the district will voluntarily undertake independent scientific peer review." (373.042 (2)). Section 373.042 (4)(a) defines independent scientific peer review to be a "...review by a panel of independent, recognized experts in the fields of hydrology, hydrogeology, limnology, biology, and other scientific disciplines, to the extent relevant to the establishment of the minimum flow or level." Therefore, as MFL methodologies are established, the District must form an independent scientific peer review panel to review the MFL methodologies before they are adopted.

The recently established District MFL rule in 40D-8 FAC states "The District has many ongoing environmental monitoring and data collection analysis programs, and will develop additional programs over time. The District intends to coordinate with local governments, Tampa Bay Water, government-owned and privately-owned utilities, environmental regulation agencies, Tampa Bay Estuary Program, public interest groups and other affected and interested parties to design, create, and implement the program. Together with all parties' designated experts, a long-term independent scientific peer review shall be included in all programs. These programs supplement the District's available information upon which Minimum Flows and Levels can be established and reviewed." (40D-8.011(5)). Therefore, the District has committed to involving the community within Northern Tampa Bay in the MFL process.

In support of Chapter 373 FS and Chapter 40D-8 FAC requirements, the District proposes the formation of a Local Technical Peer Review Group (LTPRG). The LTPRG is intended

to provide an opportunity for input from expert representatives of the community on the various technical projects being performed by the District and other agencies in the Northern Tampa Bay area, to provide more opportunities for technical information to be exchanged, and to help assure that the best available data and scientific methods are used to manage the water resources of the Northern Tampa Bay area. The following is staff's recommendation on how these processes will work.

Northern Tampa Bay II Local Technical Peer Review Group (LTPRG)

Due to the large number of projects associated with the NTB II program, as well as the multi-disciplinary nature of most of the projects involved, several technical groups composed of individuals with very specific fields of expertise would not be desirable. Since the personnel from various agencies that will likely participate will be limited (i.e., many of the same experts would likely be on most of any individual groups), separate technical groups for each of the dozens of projects listed in the NTB II Scope of Work would also be impractical.

The District proposes creating one main panel of technical experts, comprised of representatives from each party that is interested in participating. Parties may choose to be represented by more than one expert, but each party will be asked to assign one expert that will have the time to regularly participate. The representative should have the ability to budget the time necessary to review project materials, including scopes of work and project results, and be prepared to discuss the materials and offer suggestions at meetings. Because the District and other participating agencies have many ongoing projects with often demanding time lines, active and timely participation will be required for the group to be productive. If active participation is not pursued by the representatives, project time lines will continue regardless. Although the District is offering this process as a way of receiving technical input on District projects, participants are encouraged to bring their own projects to the group for comment and discussion, thus increasing the level of understanding and information exchange for all scientific analysis in the Northern Tampa Bay area.

Participants should be technical experts, rather than attorneys, non-technical managers, policy-makers, or lay people. The meetings will be public, but for the group to make progress on the many technical projects, discussions during the meetings must remain technical in nature.

The LTPRG will need to meet regularly (frequency to be determined by the group), and be presented with basic information on the various NTB II projects. The main panel will determine whether they will provide input to the project directly, or if a technical subgroup is needed. If so, staff or consultants of the parties can be assigned to subgroups, and the subgroup's review can be presented to the main panel. Participants of the subgroup may be a subset of the main panel, or may be other technical staff or consultants. The main panel can also prioritize the projects in which they will invest time, and allow smaller projects to have input from the panel at lesser frequencies, if at all.

Once the LTPRG process has been completed, subject to the District's time constraints for projects, the District will move on with any applicable implementation. The only exception would be when the direct result of a project is a methodology to establish MFLs. In accordance with Chapter 373, the District will submit the methodology to an independent scientific peer review panel (discussed in more detail later in this document).

At the District's discretion, with consideration of input from the LTPRG, the District may submit project scopes of work and/or results that do not directly result in District Governing Board adoption of MFLs to independent peer review. Such projects may be for techniques that support MFLs in the future, or projects of importance to other District programs.

At some point, it is anticipated that the main group and subgroups will reach a disagreement about a policy or legal requirement that impedes advancement of technical discussions. Rather than be discussed or debated by the LTPRG, these issues will be identified, and District staff will bring these issues to the attention of legal and executive staff, or the Governing Board. Clarification or direction from these outside processes will be sought so that technical work may continue. Other participants may address the issues at the Governing Board's monthly meetings, if so desired. To keep the LTPRG focused on technical issues, non-technical issues will not be debated at length in LTPRG meetings.

Voluntary Peer Review

Peer review is sought by the District for two purposes: 1) to meet the requirements previously quoted from Chapter 373 FS, and 2) to provide for sound technical review on other key projects. For purposes of Chapter 40D-8, FAC, the main source of scientific peer review for Northern Tampa Bay technical projects will be the LTPRG. However, when methodologies are developed for minimum flows and levels, Chapter 373 FS requires that the District submit the supporting technical analysis to a panel of independent recognized panel of experts in a voluntary peer review process. This process will apply not only to projects in the Northern Tampa Bay area, but throughout the District.

To accomplish Chapter 373 peer review, the District proposes that a pool of experts for this and other purposes be established. The South Florida Water Management District (SFWMD) has had an Expert Assistance Program in operation since 1993, which could serve as a model for this program (Redfield and Urban, 1998). As of 1998, the SFWMD maintains a pool of nearly 400 experts throughout the country within 66 fields of expertise. The experts are sought annually through nationally advertised Requests for Proposals. Responses are reviewed, and those experts demonstrating appropriate qualifications are added to the list. SFWMD staff accesses the services of the experts through the issuance of Purchase Orders. The experts are used for independent peer review, but are also used for short-term technical assistance in a variety of projects. SFWMD's policy is to avoid using the same expert for multiple projects, and over the five-year period from 1993 to 1997, used most experts only once or twice.

From FY 1993 to 1997, between 40 and 53 Purchase Orders per year were issued for assistance in technical projects, at a cost of about \$250,000 per year. About 21 percent of these purchase orders were used for peer review, while others involved expert assistance in activities such as ecologic and hydrologic projects, statistical analysis, and model development. The cost of individual Purchase Orders ranged from about \$1,000 to the maximum of \$25,000.

The SWFWMD plans to establish a similar program. To provide an opportunity for community involvement in the voluntary peer review process, the District proposes several avenues of input. First, District staff will compile a list of desired categories of expertise for which qualifications will be reviewed. District staff will bring the list of categories to the LTPRG for input. Once the list of expert categories is established, the District will issue Requests for Qualifications. District staff will review the qualifications of each submitting expert, and will assign each of the qualifying experts to the various expert categories. Many experts will likely be assigned to multiple categories, while others may be found to be inappropriate for any category. This list will again be brought to the LTPRG for input. The process will be repeated annually.

When a panel for peer review is needed, District staff will determine the fields of expertise that are needed, and choose the panel from the list of experts. As is done by the SFWMD, staff will avoid using repeat experts on panels on a short-term basis. However, depending on the number of experts in each category, this may not always be possible. Once the panel is chosen, the LTPRG will be advised of the final selection. As an option, if any participant of the LTPRG believes that a particular field of expertise is missing from the panel, the participant or participants can choose to add a panelist to cover the field of expertise at their own expense. However, the expertise must be included in the existing list of technical fields, and the panelist must be chosen from that list.

Once the panel is formed, the peer review will take place according to the guidelines and time schedules set forth in Chapter 373, and a final report will be produced. The results of the peer review will then be presented to the LTPRG, and the District will make changes it deems necessary to the minimum flow or level methodology.

Complete District Process for Minimum Flows and Levels

District staff hopes to accomplish the goals of Chapter 373 FS and 40D-8 FAC through a combination of the NTB Phase II Scope of Work, the LTPRG, and the voluntary peer review process. Together, the complete process is proposed to be as follows:

 For any given minimum flow or level, District staff will review data and existing analyses concerning the issue, frame the problem, and discuss/review the issues with the LTPRG. Policy and non-technical issues, if any, can be identified during this process.

- 2) Staff will present identified non-technical issues to legal and/or executive staff for input.
- 3) District staff will apprize the Governing Board of policy issues and options underlying various MFL strategies. As in all Governing Board meetings, local agencies, governments, and members of the public have the opportunity to address the Board on the issues as well.
- 4) Based on the presentation by staff and other information, the Governing Board will provide policy direction, and give District staff authority to pursue the technical work for the minimum flow or level.
- 5) Staff will coordinate the technical approach with the LTPRG, perform the work, and present the results to the LTPRG for input. If the District desires peer review for the scope of work, the voluntary peer review process will begin.
- 6) Additional non-technical issues that are identified by the District during the LTPRG process will be brought to District legal and executive staff, and potentially the District Governing Board, for further clarification and/or direction.
- 7) Upon completion of the technical work and LTPRG process, staff will begin the peer review process for the final work. Sections of the methodology previously reviewed by a peer panel will not be subject to this review.
- 8) Upon completion of peer review and any resulting changes, District staff will propose the final MFLs for rule making to the Governing Board for approval.
- 9) Upon Governing Board approval of the MFLs, rule making workshops will begin, and eventually the new minimum levels, flows, and/or rules will be published.