

August 19, 2010

Mr. Ron Ellis (MC 160)
Texas Commission on Environmental Quality
Bldg. F, Room 3101
P.O. Box 13087
Austin, Texas 78711-3087

Re: Comments to Environmental Flows Rulemaking

Dear Mr. Ellis:

This letter is submitted on behalf of Freese and Nichols, Inc. (FNI) in response to the Texas Commission on Environmental Quality's (the "Commission") request for comment on five questions presented during the August 12, 2010 stakeholder meeting to discuss setting environmental flow standards for the Sabine, Neches, Trinity, and San Jacinto River basins and their respective bay estuary systems.

We appreciate the opportunity to provide input to a process that potentially will affect water users in these basins and could serve as a template for rule making in other river basins across Texas. FNI understand the legislative deadlines that the Commission must meet in accordance with HB3/SB3 requirements for rule making for environmental flows. However, it is important to note that the process set forth in HB3/SB3, which included developing scientific based recommendations with consensus of stakeholders, has not met the goals of the legislation. Scientific data has been largely limited to historical hydrologic data with an unproven relationship to defining a sound ecological environment. As a result there is no consensus on the part of the Basin and Bay Expert Science Teams ("BBESTs") and the Basin and Bay Area Stakeholder Committees ("BBASCs") regarding instream flow goals for the basins under consideration. Another driving force behind the lack of consensus is that there has not been sufficient analysis of the impacts of the different recommendations up to this point. It is our opinion that it would be premature for the Commission to promulgate rules until consensus has been reached and the analysis has been fully vetted through a public process.

1. **Did we select appropriate strategies to perform the balancing?** (Projects identified include: a) SRA permit application for additional yield from Toledo Bend, b) Lake Fastrill replacement project, c) DWU application for stormwater inflows to Lake Ray Hubbard, d) unappropriated flows downstream of Lake Houston)

The proposed list of projects for impacts analyses is a starting point, but a comprehensive approach should be undertaken. It is difficult to identify project types that will need to be included until the Commission identifies how the rules will be applied. For example, would the standards apply to permitted projects seeking an interbasin transfer (IBT), but no increase in diversion? How will the

Commission approach reuse projects? The projects listed include only new appropriations. The TCEQ should identify all project types that may be impacted by the standards and include representative projects for each type. We recommend that all projects included in the regional water plans should be evaluated prior to setting environmental flow standards. The implementation of regional water plans should not be left to future adjustments based on adaptive management.

2. How should set-asides be handled?

FNI does not support set asides for environmental flow purposes. If set asides are included in the Commission's rules, FNI recommends that the environmental flow standards be fully vetted before set asides are granted. If and when set asides are granted, set asides should have a priority date and should be junior to existing water rights.

3. How should amendment applications that do not request a new appropriation of water, but would require environmental flow restrictions, be treated? Would the standards apply to these types of applications?

It is unclear as to which amendment applications the Commission is considering to subject to environmental flow standards. Amendments that do not request new appropriation or reduce permit required return flows should not be subject to the environmental flow standards. Applications involving the conveyance of developed water (such as reuse and bed and banks authorizations) should not be subject to environmental flow standards. If an amendment application is determined to be subject to environmental flow standards, the environmental flow standards should only apply to the amended portion of the water right and must have an associated priority date consistent with the time of the amendment.

4. Should the same standards applied to large projects also be applied to applications requesting small amounts of water?

Large projects should be treated differently from small projects. The level of impacts to instream flows is substantially different.

5. How should the standards be applied for applications on ungaged tributaries?

Locations of the environmental standard criterion should be relatively close to proposed diversion location. Drainage area ratios could be used in lieu of site-specific data. However, environmental flow requirements for ungaged tributaries should be based on project-specific studies and not environmental standards when possible. Since the proposed environmental flow targets are strictly based on historical hydrology, more comprehensive science should prevail over such targets. This should apply for all project-specific studies on both gaged and ungaged tributaries.

In addition to the comments provided to the specific questions above, we offer the following consideration for the Commission when developing rules for environmental flow standards.

- A. *Pulse flow criteria should not apply to reuse.* Indirect reuse is a significant source of future water supplies in the state. Return flows are relatively constant and are a part of the base flows in the receiving stream. Return flows do not increase significantly with rainfall events. Therefore, it is appropriate to only apply the base flow portion of the proposed environmental flows to reuse projects. This implies that reuse supplies not be curtailed during pulse events.
- B. *Proposed environmental flows should not affect the feasibility of recommended water supply strategies in the current State Water Plan.* TWDB guidance specifies that all water supply strategies in the regional plans consider instream flows and other environmental impacts. Proposed environmental flow recommendations could be applied to these projects. However the new criteria could reduce the yield of these projects to the extent that they are no longer feasible.
- C. *Frequency of meeting proposed environmental flow targets for the basins under considerations should be based on full exercise of existing water rights with priority dates before September 1, 2007.* The frequency of meeting the proposed environmental flows is an important part of the flow recommendation. The frequency of meeting the criteria should be set on a realistic basis. Since the new criteria will not apply to existing water rights with a priority date before September 1, 2007, it is appropriate that the criteria can be met no more frequently than with full exercise of these water rights.
- D. *Operating rules to meet environmental flow targets should be determined by the applicant for major projects.* The proposed environmental flows are defined in a way that does not directly lead to permit language. Applicants for major water supply projects (such as a major reservoir) should be allowed the flexibility to determine their own site-specific operating rules for environmental bypass and the method for measuring compliance with the criteria. These rules would be part of an operating plan that would be similar to accounting plans used for compliance in complex water rights. Owners should be able to modify operating plans with approval of the Executive Director if environmental flow targets are not being achieved.
- E. *Only the environmental flow targets immediately downstream of a project apply.* If a project is in the upper portion of a river basin, only the environmental flow targets immediately downstream of the project apply when measuring compliance. A project should not be affected by environmental flow targets far downstream, particularly if there is a major reservoir between the proposed target and the downstream criteria.
- F. *Pulse criteria should apply only when a diversion could significantly impact the function of the pulse.* In the lower portions of many river basins, the flow associated with a high flow pulse is significantly larger than most diversions. These diversions would have minimal impact on the ecological function of the pulse. A diversion should be curtailed during a pulse only if it could significantly reduce the peak flow, volume or duration of the pulse.

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FNI recognizes and appreciates the amount of work that the Commission, the BBEST and BBASC teams have contributed to identifying the issues and developing recommendations based on the data available within the time frame designated by the legislation. As the Commission embarks on the next steps of developing appropriate rules, we urge you to consider the potential long-term implications of this process and take into consideration the State's water planning process. Should you have any questions regarding these responses, please feel free to call me, Ms. Simone Kiel or Mr. Jon Albright (817) 735-7300 at your convenience.

Sincerely,

Freese and Nichols, Inc.

A handwritten signature in black ink that reads "Thomas C. Gooch". The signature is written in a cursive style with a large, stylized initial 'T'.

Thomas C. Gooch, P.E.
Vice-President

Cc: Simone Kiel
Jon Albright