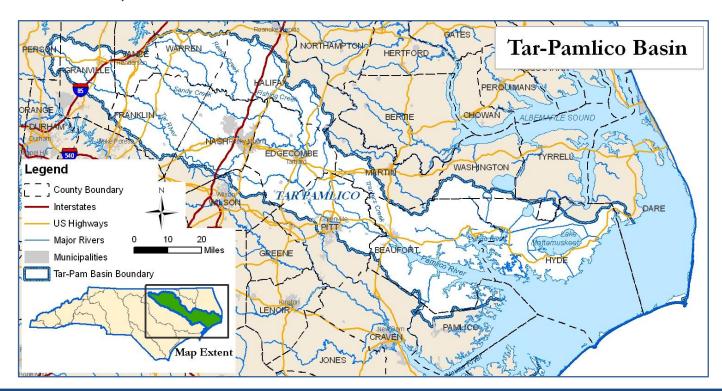
# Tar-Pamlico River Nutrient Strategy Fact Sheet

Location: River Basin: Cataloging Unit:	Eastern North Carolina – Areas Draining to the Pamlico River Estuary. Tar-Pamlico 03020102
Counties:	Beaufort, Dare, Edgecombe, Franklin, Granville, Halifax, Hyde, Martin, Nash, Person, Pitt, Vance, Vance, Warren, Washington, Wilson
Basin Area Stream Miles Major Tributaries:	6,148 Over 2,300 Tar, Pungo, and Pamlico rivers, Fishing, Sandy, Tranters, and Town creeks
Strategy Goal:	Nitrogen: Achieve and maintain a 30% reduction from 1991 levels  Phosphorus: No increase from 1991 levels.  (Goal applies to both Point and Nonpoint pollutions sources)
Land Use:	Developed (7%), Agriculture (28%), Forest (55%), Open Water (10%) (Source: 2001 NLCD)
Strategy Website:	http://portal.ncdenr.org/web/wq/ps/nps/tarpamlico
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## **Strategy Overview**

In the mid-1980's, the Pamlico River estuary saw an increase in problems that pointed to excessive levels of nutrients in the water - harmful algal blooms, low oxygen levels, increased numbers of fish kills, and other symptoms of stress and disease in the aquatic biota. In response, the NC Environmental Management Commission (EMC) designated the Tar-Pamlico River Basin as "Nutrient Sensitive Waters", and called for a strategy to reduce nutrient inputs from around the basin to the estuary.



#### **Strategy Overview (Con't)**

Modeling of the estuary was used to develop a TMDL and establish a 30% reduction goal for nitrogen loading from 1991 levels while holding phosphorus loading to 1991 levels.

Follow-up action from the EMC resulted in a series of agreements that have collectively reduced point source loads in the basin while providing for point-to-nonpoint source nutrient trading. Additionally, the Tar-Pam Nutrient Strategy was adopted by the EMC in 2001. It outlines goals, actions, and timelines for nonpoint sources to meet loading requirements. Accordingly, the strategy has rules addressing agriculture, new development, nutrient management, protection of riparian buffers and wastewater dischargers. It also includes elements allowing for nutrient trading to reduce loads from point sources and new development.

## Tar-Pamlico Nutrient Strategy Rule Overview

### Agricultural Rule

- Specifies those farm operators that are covered under the rule and their required actions.
- Creates Local Advisory Committees to develop local nutrient strategies and report nutrient reduction progress.
- Basin Oversight Committee reviews and tracks agricultures progress toward meeting its reduction goals.

#### Nutrient Management Rule

- Applies to fertilizer applicators, people who own or manage fertilized lands, and consultants who provide nutrient management advice.
- Specifies fertilizer applicators either take statesponsored nutrient management training or have a nutrient management plan in place for the lands to which they apply fertilizer.
- Details elements required in a nutrient management plan.
- Does not apply to residents applying fertilizers to their own property.

### Point Sources / Trading

- Point source agreements involving the Tar-Pam Basin Association and DWQ govern 98% of permitted discharges in the Basin and establish the Association's discharge caps.
- Allows for nutrient trading from point to NPS.
- Currently in Phase 3 of the Agreement which runs through 2014.
- Other rules detail requirements for new and existing nonassociation dischargers operating in the Basin.

#### **Buffer Rules**

- Protects and maintains existing 50-foot wide riparian buffers to help stabilize streambanks, prevent soil from eroding into the water, and act as a filter to remove pollutants.
- Applies to surface waters including intermittent and perennial streams, lakes, ponds, and reservoirs that are shown on a county soil map or USGS 1:24,000 topographic map.
- Details uses that apply to the undisturbed inner Zone 1 and outer Zone 2 of the riparian buffer.
- Specifies exemptions including the footprint of existing uses and agricultural uses.
- Details uses that are allowed, allowable with mitigation and prohibited within the buffer.

#### Stormwater Rule – New Development

- Specifies the local governments covered by the rule.
- Requires governments under the rule to identify and remove illicit discharges, have a education program on how to reduce nutrient runoff, and make efforts toward treating runoff from existing developed areas.
- A nutrient by-down option is included as a tool to achieve the required 4 lbs/ac/yr nitrogen and 0.4 lbs/ac/yr phosphorus on stormwater runoff. Development, however, must first meet the following conditions:
- Nitrogen export for residential development cannot be greater than 6.0 lbs/ac/yr
- Nitrogen export for a commercial / industrial / institutional development cannot be greater than 10.0 lbs/ac/yr.
- If nitrogen export exceeds 6.0 lbs/ac/yr or 10.0 lbs/ac/yr for residential or commercial development respectively, then the developer must use BMPs or take part in an approved stormwater strategy to lower the nitrogen export to target levels. The offset payment option can then be offered to address the remaining reductions needed to meet 4.0 lb N and 0.4 lb P/ac/yr.

For more information on the Tar-Pamlico Basin Nutrient Strategy, please visit DWQ's website at http://portal.ncdenr.org/web/wq/ps/nps/tarpamlico