



# Truro's Comprehensive Water Management Plan Newsletter






## What is a "Comprehensive Water Management Plan"?

A Comprehensive Water Management Plan ("CWMP") is a long-term plan that addresses the impact of human activity on our ground and surface waters. In Truro, the primary focus will be on septic systems and storm water runoff and their impact on our drinking water and embayments. We are in the second year of work on Truro's CWMP.

The overall approach will be to identify management strategies that will work to protect the water resources of Truro for future generations and will not be an economic burden.

This work is important because:

-  Environmental activists and state regulators have been pressuring municipalities to perform this analysis and take action.
-  Truro's ground water is the sole source of drinking water for Truro and Provincetown.
-  Our embayments are very sensitive to nutrients, especially nitrogen from septic systems and fertilizers.

## Who is Creating the Plan?

The Water Resources Oversight Committee (WROC), Assistant Town Administrator/Planner, and our Health Agent are managing the process.

### WROC Members

Kevin Kuechler, Chair	Shannon Corea
Mark Peters	Amanda Reed
Peter Romanelli	Bill Worthington

### Staff

Patricia Pajaron, Health/Conservation Agent  
 Charleen Greenhalgh, Assistant Town Administrator/Planner  
 Weston & Sampson, Consulting Engineers

## About this Newsletter

We created this newsletter to "get the word out" by providing ongoing information and gathering feedback. This newsletter will be distributed to various boards and committees and organizations. Copies will also be available at Town Hall, the Library, and Truro's web site: [www.truro-ma.gov](http://www.truro-ma.gov)



## CWMP Phase I: Progress to Date and Emerging Conclusions

Since January 2012, the CWMP team has made substantial progress. Milestones include:

1. Created a Geographic Information System (GIS) and model of nitrogen in Truro's ground water.
2. Completed field work and data review to validate nitrogen model.
3. Identified and evaluated areas where storm water runoff is a problem.

Both the nitrogen *model* and real data (from our town-wide nitrate testing program) indicate that Truro, unlike many Cape Cod Towns, does not have a widespread nitrogen problem. Instead, the data suggests that there are discrete areas that require attention where neighborhood-level interventions (for example, septic system improvements) can be performed to reduce nitrogen impacts. The need for Town-wide sewerage and centralized treatment is not present nor do future projections, including build-out analysis, indicate that it will be needed.

Additional work addressing the Pamet and East Harbors will be conducted during the next phase of work and beyond.



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## CWMP Phase II: Planned Activities


During Phase II, we will focus on three things:


1. Evaluate several neighborhoods where nitrates are elevated.
2. Install monitoring wells to further analyze Beach Point and other critical areas.
3. Develop options for improvements to storm water outfalls and conceptual design for Route 6 drainage.

At the end of Phase II, we will have neighborhood-specific option(s) to address elevated nitrate levels in ground water and surface waters.

## As a Homeowner, What Can You Do Now?

 **Participate in voluntary nitrate sampling program - about one-third of the town will receive bottles this year.** The cost and timing of our ongoing CWMP analysis has been significantly reduced by the data that we have collected from the nitrogen sampling program over the past five years. Special thanks to all who have participated. Your continued participation is vital so that we can detect changes over time.

 **Have your septic system pumped and checked, especially if you haven't done so in the past 3 years.** Pumping can significantly reduce the amount of nitrogen that otherwise would seep into your or your neighbor's drinking water.

 **Use fertilizer judiciously: Follow directions, apply when the ground is warm (above 50°F) and avoid application before major rain events.** Even better: focus on plants that do not require fertilizers at all.

## Glossary of Terms

**Nitrogen:** An element abundant in the atmosphere as a gas (N<sub>2</sub>). When combined with oxygen to form nitrate (NO<sub>3</sub>), it can cause excessive algal growth in marine waters, which can lead to eutrophication.

**Nitrite:** An intermediate oxidation state of nitrogen between nitrate and ammonia. Nitrites (NO<sub>2</sub>) are converted to nitrates by the human body. It is also used in food production to cure meats.

**Nitrate:** A key ingredient of fertilizer. Also results from the breakdown of human waste. Considered a broad indicator of contamination of ground and surface water.

## Upcoming Meetings and Events - Town Hall

May 22, 2013 WROC Meeting 4:30pm

June 19, 2013 CWMP Public Meeting 6:00pm

July 7, 2013 Present to TNRTA (Congregational Church)

July 16, 2013 Present to Board of Selectmen



Questions regarding the CWMP process should be directed to:

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Or write us at:

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