

**BOROUGH of METUCHEN**  
**Environmental Commission**  
**Minutes of the June 15, 2011 Regular Meeting**

A meeting of the Metuchen Environmental Commission was held on Wednesday, June 15, 2011 at 7:00 PM at Borough Hall. Present: Mark Herzberg, Chair, Dorothy Rasmussen, Council Liaison, Dan Hirsch, Joe Schaffer, Steve Toth and Brian Weeks. Absent: Pat Donahue, Tom Rudel and Ann Sardone.

The meeting was called to order at 7:15 PM.

**CORRESPONDENCE**

None reviewed this evening.

**NEW BUSINESS**

Two speakers from Food and Water Watch presented their organization's request that the Borough pass a resolution endorsing their call for a federal ban on extracting natural gas from wells using hydraulic fracturing. This technology, known as "fracking," allows commercially viable drilling for natural gas in deep layers of bedrock. Fracking has begun in many areas worldwide. The closest area to Metuchen is the "Marcellus shale" formation, which extends through West Virginia, Maryland, Pennsylvania and western and central New York State. This includes most of the upper Delaware River watershed. As we discuss below, New York State has imposed a temporary moratorium on fracking due to concerns about its environmental effects on New York City's water supply. In Pennsylvania, drilling has begun on thousands of gas wells. Since the technology uses large volumes of water and produces large volumes of wastewater that is not easily cleaned, fracking could harm the quantity and quality of water supplied by the Delaware River. The Delaware River supplies water to millions of people, including much of central New Jersey (and Metuchen) and almost all of New York City. Withdrawing large volumes of water from the river, and discharging large volumes of contaminated water into it, would affect the reliability, cleanliness and cost of our water supply.

A portion of Metuchen's drinking water comes from the Delaware River via the Delaware and Raritan Canal. The facility that treats our drinking water drawn from the canal is located in Franklin Township. (The rest of our water comes from the upper Raritan River and from groundwater wells in nearby towns such as Edison and South Plainfield.)

Hydraulic fracturing technology injects significant amounts of water (millions of gallons per well) and a mix of undisclosed chemicals into the ground under pressure to fracture gas-bearing layers of underground rock. The pressurized water and chemicals release gas from the cracked bedrock. Gas and a liquid mixture returns to the surface. The liquids include some of the injected chemicals as well as other liquid chemicals that have been stored in the bedrock for millions of years. Those geological liquids usually contain high

concentrations of salts, dissolved hydrocarbon fractions (similar to natural gas and petroleum) and radioactive isotopes (such as barium and strontium). The drilling companies have refused to disclose the ingredients of the drilling fluids they inject. As recommended by a confidential energy task force chaired by former Vice President Cheney, Congress voted to allow drillers to treat drilling fluid ingredients as confidential, and to exempt them from regulation under the federal Safe Drinking Water Act. Based on the limited information that has been disclosed, the drilling fluid mix contains chemicals that are hazardous to human health and the environment. Regulation of the disposal of drilling wastewater varies by state; in Pennsylvania, for example, the U.S. EPA has expressed concern with disposal into streams and sewage treatment plants that are not equipped to remove some of the chemical pollutants (such as salt and radioactivity).

On the other hand, hydraulic fracturing technology has enabled drilling for large amounts of natural gas in deeper rock layers in several areas of the U.S. and other countries. As a result, natural gas prices have begun to fall, reducing the costs to generate heat and electricity using natural gas. Using natural gas instead of coal to generate electricity can reduce air pollution and greenhouse gas emissions from power plants. Increased use of natural gas could reduce the amount of petroleum oil imported into the U.S., but significant investment would be required. For example, some motor vehicle fleets could be converted to use natural gas rather than gasoline or diesel oil as a fuel. A more cost-effective option would be converting more heating systems to burn natural gas rather than oil. At this time, though, due to the very limited use of natural gas as a motor vehicle fuel and the small amount of electricity generated in the U.S. using petroleum oil, increased fracking will not directly reduce the dependence of the U.S. on imported oil.

The Delaware River Basin Commission, a four-state agency (NY, NJ, PA & DE), is now considering whether to ban or restrict fracking. As stated above, New York State has imposed a temporary moratorium; the U.S. EPA is studying the environmental effects of the technology; the New Jersey legislature is considering whether to ban or restrict the practice; and a number of local governments have expressed their support for a ban or stricter regulation. The Food and Water Watch presenters said that the Borough of Highland Park, Franklin Township and six other municipalities in New Jersey have recently passed resolutions calling for a federal ban on hydraulic fracturing. They provided copies of a model resolution and the resolutions passed by Highland Park and Franklin Township.

Discussion followed on options for the Borough Council to consider. A consensus emerged that the primary concern to the Borough of Metuchen is the possible effect of current hydraulic fracturing water use practices on the quality, quantity and cost of our drinking water supply. Dorothy Rasmussen, our Council Liaison, will discuss further with the Council.

Introduction of Dan Hirsch, the newest member of Environmental Commission. Dan has lived in Metuchen for 18 years, is a member of the Planning Board and Planning

Commission, and has an interest in environmental issues. This evening was his first meeting. Dan will serve as our liaison to the Planning Commission.

## OLD BUSINESS

**Open Space - Dismal Swamp:** Discussion of a possible wetland mitigation project in or near the Borough. Locations could include the Dismal Swamp, the streams flowing into it, the trailhead park parcel, suitable locations such as adjacent to Mill Brook near the Greenway, and the east (Edison) side of the pedestrian bridge from behind Tano Mall over Route 1. Such a project would create and/or improve wetlands, and some State funds are available for qualifying projects.

Joe presented a Geographic Information System map that he prepared, showing a variety of geographic features in and near Metuchen. The map incorporates aerial photos and shows property block lines, elevation contours, parcels that include or border on wetlands, streams, and flood plains, and other features. This map will prove very useful, and could for example enable hydrological analysis to identify parcels appropriate for a wetland mitigation project.

Discussion of long-term plans for possible land acquisition and wetlands mitigation projects in the Dismal Swamp, to improve public access to this local natural area.

**Greenway:** Discussion of the status of and planning for extending the Greenway over Middlesex Avenue to the northwest corner of the Borough. Mark has arranged a meeting with Rick Leer of the Middlesex County Department of Planning's Transportation Coordinating Committee to present the Greenway extension plan developed by the Borough and to discuss transportation aspects of the Greenway extension. We will meet on Tuesday June 28 at 7 p.m. at the Middlesex County Planning Board Meeting Center, on the 1<sup>st</sup> floor of 40 Livingston Avenue in New Brunswick. Members of the Environmental Commission and a representative of the Borough Council will attend. Interested members of the public are welcome to attend.

**Thomas Pond Park:** Discussion of possible technologies to improve the water quality in the pond. Joe Schaffer discussed a proposal to "daylight" a section of the pipe that now carries into the pond surface water runoff from nearby streets, and to replace that section with a shallow vegetated swale. The combination of sunlight, air and vegetation should reduce the level of some pollutants in the water that flows into the pond. Joe will review the proposal to ensure no adverse effect on winter sledding in the park, and investigate possible sources of funding for the project.

**Recycling:** Discussion of two proposals by Borough DPW that may reduce resources invested in collecting solid waste, and recyclable and compostable materials. One would allow disposal of waste grass as solid waste in one garbage bin, and the other would allow mixing of all recyclables in one recycling bin. This would reduce the number of trips by DPW trucks to collect grass and to collect recyclable paper separate from other recyclable materials (such as cans and bottles). This "single stream" recycling process

would bring all the recyclables to a facility that uses machines to separate them. Pickup of large metal items would remain separate. The Environmental Commission asked our Council Liaison for a copy of the DPW calculations supporting the efficiency gains of these proposals. Mark will inquire into efficiencies experienced in nearby municipalities from this single stream recycling process.

**Edgar / Pool Parking Lot:** Brian reported that the trees are growing well. One tree (possibly a rosebud) has died and a small transplanted tree (possibly a pecan) is surviving. DPW added wood chip mulch. Brian weeded the area, picked up litter and pruned lower shoots from tree trunks where indicated.

**Energy - Global Warming:** No report.

**Planning Commission:** Discussion of impervious cover and lot coverage issues in Borough zoning and planning ordinances.

**Sustainable New Jersey:** No report.

**Dog Park:** No report.

There being no further business to discuss, the meeting adjourned at 9:30 p.m. The next meeting of the Metuchen Environmental Commission will take place on July 20, 2011 at 7:00 p.m. at Borough Hall.

Respectfully submitted,  
Brian Weeks  
Acting Secretary