

## **CONSERVATION ADVISORY COUNCIL To the Town of Ancram**

Jamie Purinton, Chair  
Andy Barnet  
David Dembo  
Choral Eddie  
Joe Hoyt  
Colleen Lutz  
Erin Robertson

*The Conservation Advisory Council (CAC) provides information, tools, and advice for use in town planning; reviews land use proposals, and advises town government in the protection of our environment. The CAC conducts townwide natural resource inventories, reviews development proposals, and gathers and distributes information to town agencies, land use applicants, and the general public.*

(Adapted from Gretchen Stevens, CAC Hillsdale)

### **CELL PHONE TOWERS Health, Safety and Environmental Aspects**

*The modern Wireless Age has truly revolutionized our world and transformed the physical and cultural landscape. Connectivity is the in word. The United States has 264 million wireless subscribers, who rely on two million cell towers and antennas to annually relay their 2.1 trillion phone minutes and 48 billion text messages.*

(Sherril Sellman, "The Wireless Dilemma: An Inconvenient Truth about a Convenient Technology," *Total Health*, March/April 2009, Vol. 30, Issue 4)

### **Health, Safety and Environmental Concerns**

There has been much discussion both in the scientific and medical literature and anecdotally, in the general press, and on the web about the health hazards of cell towers. In the scientific and medical literature, the evidence is mixed. Some studies point to no detectable hazards from cell towers (the position, for example, of the cell phone trade association –CTIA), some suggest that there may be hazards within a certain distance from the towers, and some point to the possibility of significant hazards in a wider area.

The primary concern from a health perspective is exposure to electromagnetic radiation. This has long been a concern as it affects utility workers who are exposed for several hours a day for much of their work-life to such radiation. But it has also been a concern for those living near cell towers or transmission lines or electric substations. Among the negative effects of low level electromagnetic radiation, studies have found mood swings, indigestion, ulcers and joint pain, damage to cell tissue and DNA, brain tumors, cancer, suppressed immune function, depression, miscarriage, and Alzheimer's

disease. For a description of some of the studies showing health hazards from cell towers, including a list of sources, see: <http://www.scribd.com/doc/3773284/Health-Effects-from-Cell-Phone-Tower-Radiation>.

There is also evidence that cell towers are harmful to wildlife and the natural environment. Studies suggest cell phone towers may be causing a decline in honeybee populations by affecting their communication and navigational skills and by weakening their immune systems. Cell towers are also being scrutinized in terms of how they may be affecting bird and bat populations. In fact, last year a federal appeals court ordered the FCC (see below) to review its regulations to take into account the hazards to bird migratory patterns. For further information on the impact on birds, see Malakoff, D. “FCC to Probe Role of Towers in Bird Deaths,” *Science*, August 29, 2003; and on honey bees, see “Cell Tower Complaint Filed with FCC on Behalf of Honey Bees,” *In These New Times*, November 5, 2009.

## **Regulating Cell Towers**

In the United States, the Federal Communications Commission, under the National Environmental Policy Act, is responsible for regulating hazards from cell towers and cell phones. The FCC relies on the Food and Drug Administration and other federal agencies for health and safety questions about towers and phones. While waiting for definitive findings from these agencies, the FCC now relies on 20- to 30-year old data limited to the harm caused by “thermal” hazards or overheating from radiation, but the FCC does not take into consideration any of the more recent health concerns. According to the 1996 federal communications law, local governments can only regulate the siting of cell towers based on FCC regulations—they cannot base sitings according to more recent health and safety, and environmental concerns.

Across the country, state and local representatives are attempting to get Congress to change the 1996 law so that health and environmental factors can be taken into consideration. For an informative, short discussion of these issues and the choices faced by municipalities across the country, we recommend Van Eaton, J. et al., “Local Governments, Cell Phones, and Health,” October 13, 2009, available at <http://imlablog.wordpress.com/2009/10/13/6local-governments-cell-phones>.

The position of the International Association of Fire Fighters, representing more than 296,000 full-time professional fire fighters and paramedics in the United States, on locating cell

towers' commercial wireless infrastructure on fire department facilities, "... is that the IAFF oppose the use of firestations as base stations for towers and or antennas for the conduction of cell phone transmissions until a study of the highest scientific merit and integrity on health effects of exposure to low intensity RF/MW radiation is conducted and it is proven that such sitings are not hazardous to our members."

(Source: [http:// www.iaff.org/hs/Resi/CellTowerFinal.htm](http://www.iaff.org/hs/Resi/CellTowerFinal.htm).)

In 2000, the Town of Ancram passed Local Law #1 "A Local Law Providing for the Regulation of Communications and Personal Wireless Service Facilities and Towers." This law is intended to be both consistent with Federal and State Regulations and to protect the general welfare of the Town of Ancram by "minimizing adverse visual impacts; protecting scenic, historic, environmental, natural and man-made resources of the Town; and preserving property values." Although this Law protects our Town, it clearly underscores our inability to regulate based on health, safety, or environmental concerns. Here is an excerpt from that portion of the local law:

These regulations are intended to be consistent with the Telecommunications Act of 1996 in that:

- a) they do not prohibit, or have the effect of prohibiting, the provision of personal wireless services;
- b) they are not intended to be used to unreasonably discriminate among providers of functionally equivalent services; and
- c) they do not regulate personal wireless services on the basis of the environmental effects of radio frequency emissions to the extent that the regulated services and facilities comply with the FCC's regulations concerning such emissions.

To locate a cell tower, our Local Law requires a special use permit through the Zoning Board and a site plan review through the Planning Board. According to these permit requirements: facilities must be located on lots having a minimum of five acres; only one tower per site; new towers must be set back at least two times the height of the tower from all boundaries; if in a wooded area, 50 feet of existing trees must be retained; no tower can be more than 199 feet above the ground; no commercial advertising; and no night lighting, unless required by the Aviation Administration. The siting of cell

phone towers include these setbacks: no closer than 750 feet to any structure occupied or inhabitable by any school, and no closer than 750 feet to an existing dwelling unit or day-care center, hospital, nursing home, church, synagogue or other place of worship. Towers are also prohibited on DEC or federally regulated wetlands; in habitats of endangered species; within the 100 foot buffer of a wetland; within 100 feet of a watercourse or body; within 500 feet of an historic property; within 500 feet of an archaeological site; and within ridgelines where their visual impact is detrimental to scenic areas.

## **CAC Recommendations**

- **The CAC recommends that the Town of Ancram adhere to the Local Law while considering siting of cell towers.**
- **The CAC recommends that the Town of Ancram follow all zoning and permitting processes that would apply to any private citizen while going through the siting process.**
- **The CAC suggests that the Town of Ancram consider the Precautionary Principle when considering any technology, product, or process that may have adverse effects to health, safety and/or the environment. The Precautionary Principle states that: “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.” In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the precautionary principle must be open, informed and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action.” (Wingspread Statement on the Precautionary Principle, January 1998)**