

## **REVISED Proposal for WIRELESS Nest Camera on FDOT Light Pole**

Many existing nest camera applications are located in remote areas without readily accessible electrical power and broadband. This necessitates use of solar generation and battery storage of electrical power. Signals from the camera must be boosted and transmitted over distances that require microwave technology. These can add up to very high equipment, operating and maintenance costs.

The Pembroke Pines Bald Eagle nest location presents FDOT with an opportunity to participate in a far simpler and less costly arrangement. If either Comcast/NBC or FP&L (or both) were willing to underwrite the provision of service lines and ongoing support, the cost to their companies would be marginal, as they could accomplish the tasks using existing workforce and equipment.

There is a light pole on the utility easement on the north side of the 20800 block of Pines Boulevard, directly opposite the Bald Eagle nest tree. The distance from the base of the pole to the nest tree is approximately 290 feet, as measured on Google Earth (image below). If it is available for use, it could serve as the platform for necessary equipment (cable and electrical service junction, modem, encoding computer and camera power supply) that could be housed in a secure weatherproof enclosure, readily accessible for servicing.

FP&L distribution lines are located on the south side of Pines Boulevard, and service lines already serve the light pole. If a wireless camera is chosen, it is not necessary to run a broadband cable line. The video may be transmitted wirelessly to a receiver that may be located several miles away if the signal pathway is not obstructed.

*If a wireless transmission option is not chosen, Comcast cable does service properties just north of the pole, as well as subdivisions at the NE and SE corners of Pines and 208<sup>th</sup> Avenue, about 500 feet from the nest site. (Subsurface cable distribution lines may be available along Pines Boulevard, and a fiberoptic distribution line is hosted on FP&L power poles along the south side of Pines Boulevard—ownership not known to me, but may either be Comcast/NBC or AT&T.)*

The Pembroke Pines Bald Eagle Sanctuary Steering Committee has been unable to find a grantee or other source of financial support. Removal of the Bald Eagle from the Endangered Species List has resulted in a substantial reduction in public and other resources.

Both Comcast/NBC and FP&L could realize a large return on an investment in this project. The capital expenditure is projected to be in the range of \$15,000- \$18,000, depending upon the chosen configuration of camera equipment, software and installation. The utility companies could utilize existing resources to run service lines to the camera control box, and would provide service during the eagle breeding season (December through May).

FDOT would benefit from this project, as it would reduce the public safety issues associated with the presence of large numbers of onlookers along the Pines Boulevard right of way. The agency has explored other, more costly options to reduce interaction between pedestrians and vehicles at the nest site, such as a protected viewing area or platform.

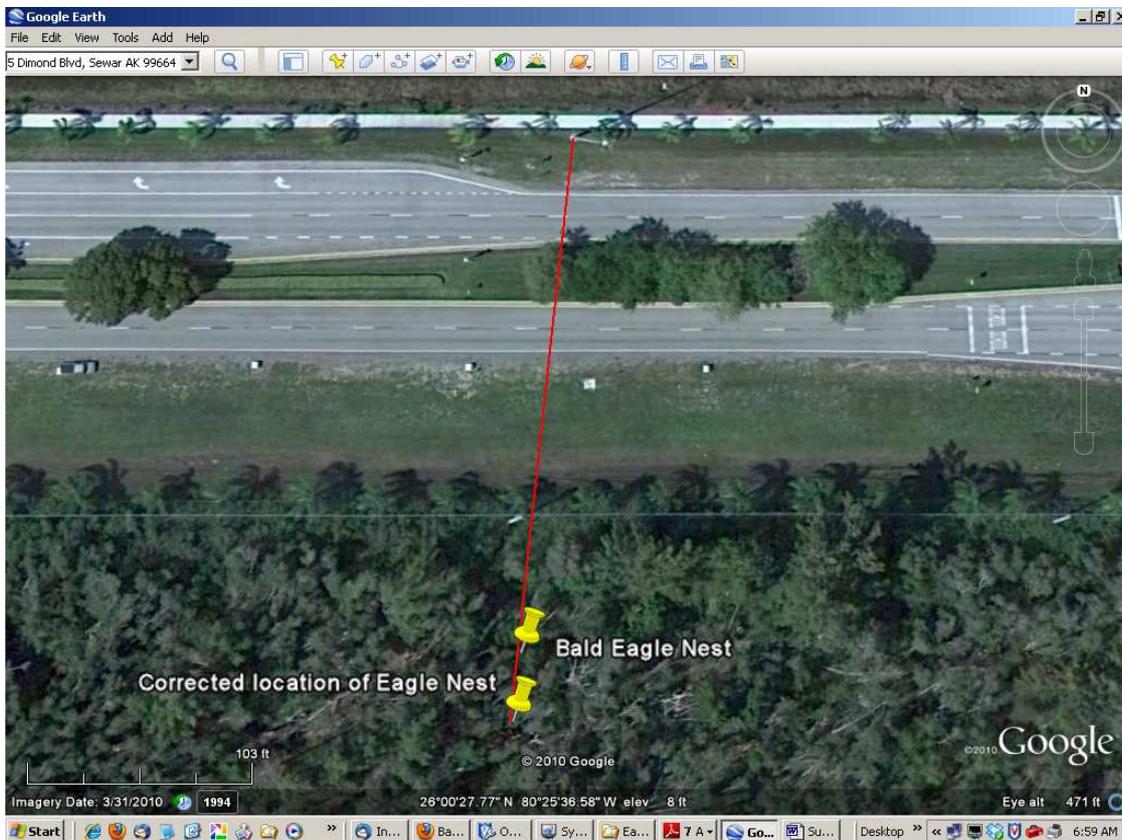
Operational support of the eagle nest camera project would require marginal resource expenditures by the sponsoring companies and FDOT, and provide a highly visible service to the community. The web camera image could be displayed on a sponsored Web page that will receive national exposure, and could provide a public service advertising outlet for FDOT, FP&L and a revenue stream for Comcast/NBC.

The local “Pembroke Pines Bald Eagle Nest Watch” web page includes a forum in which local residents share their observations and photos of the eagles with the general public. Since beginning operation in December, 2008 it has attracted 68,692 views (as of February 3, 2011). A nest camera would be expected to be immensely more popular.

There is ample precedent for public and private entities to engage in such a project. FP&L already provides a “manatee camera” that is very popular. NBC has sponsored a tracking transmitter for a Bald Eagle in South Florida. A Google search of < “eagle nest” web cam > produces over 2,820 “hits.” Among sponsors of these cameras are power companies, TV stations, non-profit associations/foundations, state and federal wildlife and environmental-related agencies, a private Web hosting company, and a private security monitoring company.

For your information, below is a sample cost proposal with an image of the remote control camera, developed in February 2010, including installation of a typical camera, related equipment and software. For product demonstrations, visit:

<http://www.earthcam.net/index.php>



**EarthCam Lite Megapixel:**



**Cost Proposal (February, 2010):**

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**EarthCam.net**  
 84 Kennedy St. Hackensack, NJ 07601 Ph. 201-488-1111 Fax. 201-488-1119 [My Account](#)

**Kenneth Schneider** Phone: **954-431-8344**  
**Bald Eagle Steering Committee** E-mail: **ken@rosyfinch.com**  
 2701 SW 193rd Terrace  
 Miramar, FL 33029

Systems	Quantity	Price	Item Subtotal	Configured	Item Total
<u>TourismCam Lite Megapixel</u>	1	\$2,995.00	\$2,995.00	\$229.95	\$3,224.95
<u>900 MHz Wireless Point-to-Point System</u>	1	\$1,197.00	\$1,197.00	\$49.95	\$1,246.95
<u>EarthCam Universal Antenna Mount</u>	2	\$15.00	\$30.00	--	\$30.00
<u>EarthCam Dome Megapixel Pole Mount Adapter</u>	1	\$0.00	\$0.00	--	\$0.00

Services	Quantity	Price	Item Subtotal	Configured	Total
<u>EarthCam Image Hosting and Mgmt - Basic</u>	1	\$3,000.00	\$3,000.00	--	\$3,000.00
<u>Certified Installation Services</u> <i>(Hourly/day rate plus expendables)</i>	1	\$1,500.00	\$1,500.00	--	\$1,500.00
<u>EarthCam Consulting Services</u>	1	\$0.00	\$0.00	--	\$0.00

Software Package - 1.00 year(s) tech support, maintenance and software upgrades	Package Total
<u>Robotic Camera Software Support Package</u>	\$2,996.25

TAX: \$0.00

Promotional Discount Included: ( \$3,844.70 )

**TOTAL: \$11,998.15**

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