

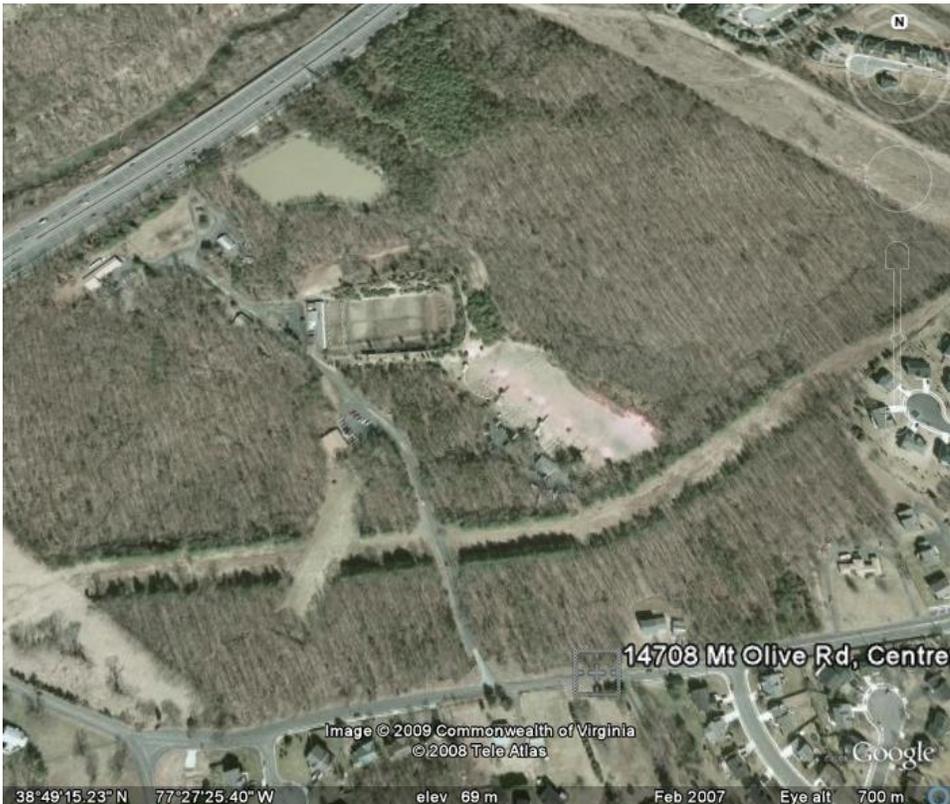
Arlington-Fairfax Chapter, Inc. Izaak Walton League of America (IWLA)

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Wise Natural Resource Stewardship at Arlington-Fairfax Chapter:

History and Highlights of the Environmental Management System (EMS) and Virginia's Environmental Excellence Program (VEEP), 2006 thru 2012.



Arlington-Fairfax Chapter, Inc.; Izaak Walton League of America (IWLA) aerial view; 14708 Mount Olive Road, Centreville VA

INTRODUCTION

The Arlington-Fairfax Chapter, Inc. of the Izaak Walton League of America (IWLA) is a non-profit organization which owns and maintains a recreational park for its members in Centreville, Virginia. The property consists of 110 acres containing hiking and nature trails, a fishing pond, picnic and camp grounds, as well as active archery and shooting ranges.

In 2005, the Chapter conducted a series of voluntary assessments of the property, including an environmental investigation with tests of water, soil, and wildlife on site. Other assessments included a wetlands delineation, compliance review, and gap analysis to Best Practices and Quality Management System standards (QMS).

ENVIRONMENTAL MANAGEMENT SYSTEM (EMS): In 2006, the Chapter notified Virginia's Department of Environmental Quality (DEQ) of its intent to implement an Environmental Management System (EMS) and seek admission to the Virginia Environmental Excellence Program (VEEP). An EMS represents a comprehensive, cohesive set of documented policies and procedures adopted by an organization and used to establish environmental goals, and to meet and maintain those goals using a systematic approach to improving environmental performance. In 2008, IWLA was admitted to the VEEP. A Virginia DEQ official noted: "The Arlington-Fairfax Chapter of the Izaak Walton League is to be commended for its innovative approach to managing the environmental considerations of a shooting range. The Chapter is the first not-for-profit facility accepted into the Virginia Environmental Excellence Program."

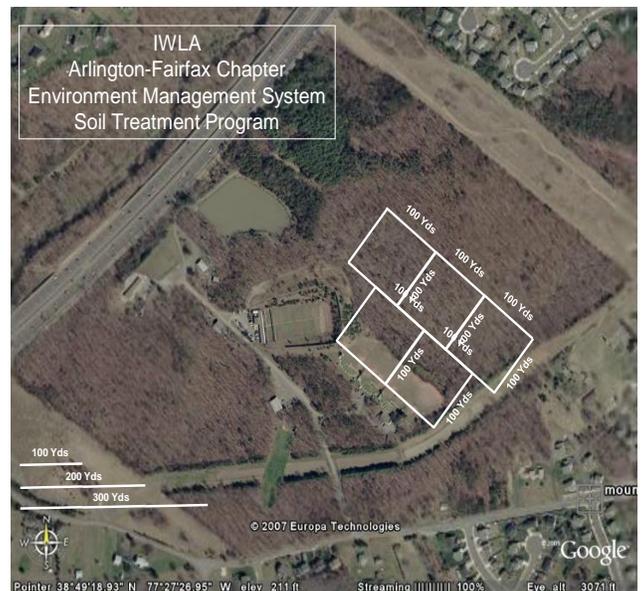
The following summaries provide highlights of the Environmental Programs and Best Management Practices adopted and implemented as part of the Chapter's EMS since 2006. They focus on the environmental improvements realized in recent years (2011-2012) as a result of individual programs and practices, or the interaction among several, in meeting the Chapter's overall environmental goals.

Water Monitoring and Quality Assurance: Since 2006, the Chapter has sampled and tested for water quality on a regular basis. Based upon the preliminary environmental investigation, and analysis by a PhD chemist, the Chapter has established 5 monitoring points which are sampled and tested 5 times a year on average, depending upon weather conditions and other factors. After test results are returned from the laboratory, they are charted and graphed for comparison to previous findings, and determining whether water quality improvement targets have been met.

In 2011, the results demonstrated that the Chapter had met its water quality goal by reducing the levels of contamination loading of water by more than 50 percent. This was attributed to the success of the soil treatment, lead recovery/recycling, and waste reduction programs 2008-2011.

Soil Treatment: In 2008, Arlington Fairfax Chapter adopted an EPA approved Best Management Practice of treating soil with lime and rock phosphate to limit the migration of lead through soil. The Chapter identified, mapped and prepared select areas as well as formulated mixtures designed to maximize the impact of the treatment strategy for different types of soils, with the objective of preventing or minimizing migration to ground water.

The Chapter monitors the effectiveness of the soil treatment program with the water quality testing described above. The Chapter also participated in a scientific experiment with George Mason University on its property to test the effectiveness of different treatment mixtures recommended by EPA in preventing lead migration through different types of soils.



Waste Management, Minimization, and Recycling Programs:

Arlington Fairfax Chapter has implemented numerous waste management, minimization, and recycling programs as part of its EMS over the last 4 years. The Chapter switched to bio-degradable targets on the skeet and trap ranges, and implemented lead management and recycling plans for its indoor and outdoor ranges. Earlier this year, 2012, the Chapter completed a successful program for wads, hulls, and cardboard, and recycling 40 truck-loads of clay.

Significantly, in 2009, the Chapter began a massive clean-up and lead recovery program at the skeet and trap range pictured below. The first phase was gathering waste from the challenging terrain in manageable ways.



The Chapter experimented with several innovative technologies to vacuum and separate lead shot from plastic casings, wads, much of it embedded in grass and soil for decades, on the most difficult terrain for collection. Phase One of this project resulted in the recovery and environmentally sound disposal of more than 20 tons of range wastes and soils. Phase Two involved the successful recovery and recycling of more than two hundred thousand pounds of lead shot in 2010.

Lead Recovery and Recycling Program:

A notable lead recovery and recycling project was completed in 2010-2011. It involved the deployment of innovative processes and technologies to reclaim lead shot in a form that it could be recycled and reused.



The project team deployed for several weeks on site to prepare the ground for efficient recovery of lead shot from heavily forested areas and rocky terrain.

Next, they spent several weeks recovering and sorting the shot, washing it, and loading it into 40 gallon drums. After recovery efforts were complete, the Chapter was able to sell more than 200,000 pounds of lead. The proceeds of this sale paid for the work of the project team, as well as some of the environmental stewardship programs which follow. The project team identified and demonstrated a model for lead recovery and recycling with broad application for shooting ranges, which may pay for itself.



Land Conservation and Stewardship:

After lead recovery was complete, the grounds were restored in a manner conducive to future lead recovery efforts, and improve the surrounding environment. The Chapter planted beneficial grasses and other flora designed for greater bio diversity on the property.

The Chapter engages in numerous land conservation and stewardship projects every year. On average, IWLA members organize cleanups of park lands, stream bed and trail restorations, in the surrounding areas, once a month. Frequently these involve groups like the Boy Scouts, and other community groups.

Preventive Maintenance, Safety, and Property Improvement: The Chapter plans property improvements and preventive maintenance on a regular basis. In the last year, this has included preventive maintenance of the pond, dam, and stream beds, as well as implementation of a lead safety program.

Training and Outreach Programs: The Chapter conducts training programs in its EMS, environmental law and stewardship for its members, and well as other Chapters and shooting ranges. It is planning to conduct a training seminar for the National IWLA conference this summer. See some training and outreach samples below:

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Announcement

Environmental Management for Shooting Ranges **Annual Training Seminar**

Centreville, Virginia: The Arlington-Fairfax Chapter, Inc. of the Izaak Walton League of America (IWLA) will conduct a training seminar and host a luncheon event entitled: ***Environmental Management for Shooting Ranges***. Representatives from other ranges in the region as well as state and national organizations are invited to join us for this special event featuring presentations from state officials and national experts in Environmental Management Systems (EMS) and solutions for active shooting ranges.

The training sessions will cover three topic areas:

- (1.) Training in Arlington-Fairfax Chapter's Environmental Management System (EMS). The Commonwealth of Virginia's Department of Environmental Quality (DEQ) recognizes the Chapter's leadership in environmental protection by admitting the Arlington-Fairfax Chapter into the Virginia Environmental Excellence Program (VEEP). This session constitutes annual training required for Environmental Management Systems, as well as the process for assessment, review and planning environmental programs for the year ahead;
- (2.) Training in the selection and implementation of appropriate Lead Best Management Practices as part of an EMS. This session will share experience in assessing and deploying various best practices for treating soils, improving water quality, recovering and recycling lead cost effectively, and the use of innovative technologies and methodologies recognized by state and federal regulators;
- (3.) Training in environmental law and voluntary recognition programs such as Virginia's Environmental Excellence Program (VEEP). Learn about the range of laws which may apply to shooting ranges as well as resources, guidance, which are provided to organizations implementing an EMS designed to assure compliance and meet requirements of environmental leadership programs.

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