6.1 What is the purpose of this chapter? This chapter provides the Service’s policy governing the management of environmental education programs on units of the National Wildlife Refuge System (Refuge System). In an effort to avoid redundancy, we have placed critical information and guidance for all wildlife-dependent recreation (hunting, fishing, wildlife observation and photography, environmental education and interpretation) in 605 FW 1. Read 605 FW 1 with this chapter for complete information for planning and implementation purposes.

6.2 What is the scope of this chapter? The policies contained in this chapter apply to environmental education programs within the Refuge System. See 605 FW 1 and other chapters and regulations governing policies, guidelines, and procedures for additional information.

6.3 What is our policy regarding environmental education in the Refuge System?

A. The overarching goal of our wildlife-dependent recreation policy is to enhance opportunities and access to quality visitor experiences on refuges and to manage the refuge to conserve fish, wildlife, plants, and their habitats (see 605 FW 1.6).

B. Environmental education is an appropriate use of the Refuge System when compatible. It is also a priority general public use of the Refuge System and should receive enhanced consideration over nonpriority uses. We strongly encourage refuge managers to provide quality environmental education programs when compatible. Environmental education programs can promote understanding and appreciation of natural and cultural resources and their management on all lands and waters in the Refuge System. We encourage refuge staff to develop and take full advantage of opportunities to work with volunteers and partners who have an interest in conducting quality environmental education programs on refuges.

6.4 What are the guiding principles for the Refuge System’s environmental education programs? The guiding principles of the Refuge System’s environmental education programs are to:

A. Teach awareness, understanding, and appreciation of our natural and cultural resources and conservation history.

B. Allow program participants to demonstrate learning through refuge-specific stewardship tasks and projects that they can carry over into their everyday lives.

C. Establish partnerships to support environmental education both on- and off-site.

D. Support local, State, and national educational standards through environmental
education on refuges.

E. Assist refuge staff, volunteers, and other partners in obtaining the knowledge, skills, and abilities to support environmental education.

F. Provide appropriate materials, equipment, facilities, and study locations to support environmental education.

G. Give refuges a way to serve as role models in the community for environmental stewardship.

H. Minimize conflicts with visitors participating in other compatible wildlife-dependent recreation activities.

6.5 What authorities allow us to support environmental education in the Refuge System? See 605 FW 1.3 for laws and Executive orders that govern environmental education in the Refuge System.

6.6 What do these terms mean?

A. Course of Study. A course of study is an ordered process or succession, such as a number of lectures or other matter dealing with a subject, or a series of such courses constituting a curriculum. We design courses of study to meet national and State academic standards. Examples of courses of study that will meet the education objectives of the refuge and the visitor may include, but are not limited to: teacher professional development, community-based service organization programs, youth group merit badge requirements, summer camp themes, and elder hostel seminar objectives.

B. Curriculum. A curriculum is an adopted program for learning needed to achieve specific standards or goals. It includes a plan of instruction that details what students need to know, how they will learn it, what the instructor’s role is, and the context in which the teaching and learning take place.

C. Educational Assistance. Educational assistance means environmental education expertise offered by Service staff to schools, other programs and offices, other Federal and State agencies, private organizations, and individuals, either on- or off-site.

D. Environmental Education. Environmental education is a process designed to teach citizens and visitors the history and importance of conservation and the biological and the scientific knowledge of our Nation’s natural resources. Through this process, we can help develop a citizenry that has the awareness, knowledge, attitudes, skills, motivation, and commitment to work cooperatively towards the conservation of our Nation’s environmental resources. Environmental education within the Refuge System incorporates on-site, off-site, and distance learning materials, activities, programs, and products that address the audience’s course of study, refuge purpose(s), physical attributes, ecosystem dynamics, conservation strategies, and the Refuge System mission.

E. Outdoor Classrooms. Sites of structured environmental education activities that focus on the natural environment and cultural resources, come from an approved
course of study with identified learner outcomes, and involve hands-on programs in the Refuge System.

6.7 How do we foster public stewardship in our environmental education programs? Refuge managers provide environmental education opportunities which can instill an appreciation for the value of and need for fish and wildlife habitat conservation. Refuges may provide enhanced environmental education program opportunities through indoor and outdoor classrooms. Refuge managers should develop partnerships with organizations that promote environmental education and value the conservation of natural and cultural resources. We encourage refuge managers to promote their refuge’s uniqueness and address local issues within the context of the Refuge System mission. These opportunities foster a sense of stewardship for the Refuge System, fish and wildlife, and habitat resources through direct association.

6.8 What is the guidance we use to develop and implement environmental education programs? Refuges open to the public should strive to provide some level of environmental education. The environmental education opportunities we offer depend on available resources and staffing and must support the refuge’s management purposes and objectives. We advance and support the Refuge System mission and goals by developing programs based on the following guidelines:

A. Connect people’s lives to the natural world around them;

B. Advance environmental and scientific literacy through an interdisciplinary approach to learning;

C. Strengthen the Refuge System by fostering public knowledge about environmental conservation;

D. Help participants experience wildlife, wildlife habitat, and cultural resources;

E. Stress the role and importance of refuges in fish and wildlife conservation and emphasize the relationship between wildlife and their associated ecosystems; and

F. Instill a sense of stewardship and an understanding of our conservation history.

6.9 How do we support, plan, and develop environmental education programs?

A. Program Support. In consultation with Regional visitor services chiefs, refuge managers plan, develop, and implement environmental education programs to increase visitors’ knowledge and understanding and build community support for refuges.

B. Program Planning. We plan our environmental education programs by offering educational assistance and working closely with local school districts and community partners. We encourage an interdisciplinary approach that relies on existing curricula or a course of study involving natural and social sciences, history, and the arts by working with teachers, school districts, and partners. Each refuge manager should plan environmental education objectives and implementation
strategies when developing a comprehensive conservation plan (CCP) or visitor services plan (VSP). Refuge managers analyze their environmental education program’s objectives and develop an interim program if they are not scheduled to develop a CCP within 2 years. Refuge managers:

(1) Determine if current or proposed environmental education sites, programs, and activities are compatible with refuge purpose(s), approved refuge goals, and the Refuge System mission and goals;

(2) Identify staffing, funding, and other requirements of a quality environmental education program;

(3) Enhance our environmental education opportunities by working with volunteers and through partnerships with educators and others and by involving nontraditional audiences;

(4) Identify the resources for which the refuge was established, ecosystem characteristics, endangered species, wilderness, fish, wildlife, plants, and cultural resources that are key resource issues for each refuge. Working with educators, we use this assessment to identify target audiences and look for creative ways to tie resource priorities to local environmental education needs and curricula; and

(5) If possible, collect and update data identifying environmental educators, community resources, and history of use by educational groups.

C. Making Environmental Education Accessible. Meeting accessibility requirements presents the opportunity to provide better environmental education programs for everyone. Creating programs that are easily read and understood, developing facilities that are accessible to all people, and providing exhibits that contain audio or tactile elements can benefit everyone and provide multiple paths to learning.

6.10 How do we evaluate environmental education programs? We regularly evaluate environmental education programs to measure their effectiveness and to ensure that they meet the refuge’s management and program objectives; the Refuge System mission; expectations for student and teacher learning experiences; and national, State, and local educational standards. This will help us determine if we are using program resources, funding, and staffing effectively. We evaluate environmental education programs in the following ways:

A. The refuge manager, with assistance from the Regional visitor services chief or program coordinator, will evaluate the refuge’s environmental education program through development of the VSP and completion of visitor services field station reviews.

B. Refuge managers should evaluate the effectiveness of environmental education programs. This can be done by soliciting feedback from an educator after an environmental education class or field trip, pre- or post-testing for identified education concepts, self assessments completed by teachers and students, or by observing visitor behavioral changes over time. Depending upon the level of the environmental education program, the refuge manager may consider implementing more sophisticated evaluation tools to measure learning outcomes and concept
retention. Regional visitor services chiefs and their staff can assist in developing and analyzing the results of these evaluation tools.

For information on the specific content of this chapter, contact the Division of Conservation, Planning and Policy. For information about this website, contact Krista Holloway in the Division of Policy and Directives Management, at Krista_Holloway@fws.gov.