

## **IV. Environmental Education and Interpretation Plan**

### **A. Process Summary**

One of the primary purposes of the refuge is to provide environmental education and interpretation. A major component of the master planning process was to address the environmental education and interpretation needs and opportunities. To accomplish this, an environmental education and interpretation focus group was formed. The group was composed of K-12 teachers, faculty and students from The Evergreen State College and environmental educators from other agencies and programs. A series of meetings were held. Input and recommendations were also received by written reports and other submissions.

The Grass Lake Group agreed the primary focus for environmental education and interpretation at the Grass Lake refuge should be wetlands.

The specific interpretive themes were not developed. Additional environmental education and interpretive planning is needed. Three references that should be used are:

U.S. Department of the Interior, *Interpretation for Disabled Visitors in the National Park System*

Hunter, Carol, *Everyone's Nature: Designing Interpretation to Include All*, 1994, Falcon Press

Ham, Sam H., *Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets*, 1992, North American Press

### **B. Environmental Education and Interpretation Objectives**

- Provide environmental education and interpretation opportunities including programs, exhibits, materials and facilities that serve the Olympia community including adults, people with disabilities, families, teachers and pre-school and school age children.
- Emphasize the special and unique qualities, character, species and natural communities that compose the Grass Lake wetlands complex.
- Utilize environmental education and interpretation to improve individual and community stewardship for the refuge.

- Focus environmental education and interpretation facilities, exhibits, materials and programs on increasing public enjoyment and appreciation for nature and for wetlands.
- Site and design environmental education and interpretation facilities to facilitate wildlife observation and to limit environmental impacts including human disturbance to the wetlands and wildlife.
- Help people learn how to be better wildlife observers.
- Increase understanding of urban wetlands, their values, why they are at risk and how they can be protected.
- Compare Grass Lake Refuge with Yauger Park so that different management, functions and values are understood.
- Provide environmental education and interpretation in levels for different ages, interests and capabilities. For examples, introduce basic concepts on signs and exhibits.
- Provide more specialized information and ideas in brochures and other materials and during tours and programs.
- Surprise visitors and maintain their interest by using innovative exhibits, materials, programs and facilities.
- Manage the refuge for reliability so that educators and visitors can expect well-maintained trails and quality programs.
- Establish a monitoring and evaluation program to determine effectiveness and success of environmental education and interpretation so that needed improvements can be made.
- Interpret research and monitoring activities in the refuge.
- Encourage that research and monitoring findings be incorporated into environmental education and interpretation materials, exhibits and programs.
- Develop partnerships to accomplish environmental and interpretation recommendations.

- Establish a program for volunteer naturalists to lead formal and informal on-site interpretation. Involve students and neighbors in planning and offering programs.
- Continue to refine environmental education and interpretation needs, plans and proposals through implementation phases.
- Maintain outreach with the focus group to help implement recommendations.

### **C. Regional and Community Opportunities and Needs Analysis**

Rather than solely focusing on Grass Lake, the Environmental Education and Interpretation Focus Group discussed what the refuge should provide from a regional and community wide perspective. This meets the goal not to duplicate needs being met elsewhere.

“The Wetlands Inventory and Habitat Assessment for Grass Lake Park” helped to define the special character, quality and assets of the refuge so that it could be compared with other publicly owned wetlands. Many of the regional environmental education and interpretation facilities focus on saltwater. Watershed Park focuses on Moxlie Creek. The two most similar areas are the McLane Nature Trail in the Capitol State Forest and the Lake Lois Habitat Preserve in Lacey. Both of these are highly popular areas. Use of the McLane Nature Trail, which is only about a 10 minute drive from Grass Lake, is very high. The interpretive signs cover a variety of topics including the history of the forest and site. Lake Lois was developed for picnicking and other recreation in addition to the interpretive trail. Due to the size, character and location, Lake Lois does not duplicate Grass Lake.

Numerous stormwater detention facilities in the community are used for environmental education and interpretation. The Hanson Elementary School and Marshall Middle School share a common detention basin on the 65 Road just a block from Grass Lake. Students have been involved in its management and have built a trail and planted native plants. It is used by several classes. Since the water detained later enters Grass Lake there is an obvious tie in environmental learning experiences. However, constructed detention basins and wetlands do not duplicate the rich wetland diversity of Grass Lake. Both have important messages but they are not the same.

### **D. Existing Environmental Education and Interpretation Programs At Grass Lake**

The group was asked to identify existing environmental education and interpretation programs at Grass Lake. Classes from Marshal Middle School,

Capital High School and The Evergreen State College regularly use the refuge. The middle school and high school classes have focused primarily on plants and water quality. A wider range of studies have been undertaken by The Evergreen State College - hydrogeology and bird observations being two prime activities. Stream Team leaders have facilitated public school programs.

Although a few K-12 teachers are now using Grass Lake, the refuge offers far greater potential. Among the reasons teachers expressed for not currently using Grass Lake are fear of getting lost, fear of homeless people, no knowledge of area or what it has to offer, not knowing how to integrate it into the curriculum and not having teaching materials specific to the refuge.

Olympia's and Thurston County's Stream Team programs currently use the refuge but also not to its full potential.

#### **E. Existing Environmental Education and Interpretation Materials**

The group discussed existing environmental education materials that are used or could be used at Grass Lake. They include materials developed by the Stream Teams, Washington Department of Fish and Wildlife and the Washington Department of Ecology.

#### **F. Site Specific Needs and Opportunities**

Grass Lake is currently underutilized by the nearby schools for education activities. To facilitate environmental education, trails need to be improved. The refuge has a maze of trails and paths that can be very confusing and frustrating. Many dead-end. Many are very wet and muddy and sometimes flooded during the school year. Having the refuge more developed so that it feels more like a public facility or park is appealing to educators who are scared by the perceived safety risks of encounters with homeless people in remote locations and getting lost.

Grass Lake has had limited marketing to teachers. It is listed in community guides but no programs or materials specific to Grass Lake have been developed. Teachers need to be made aware of the refuge's assets and opportunities and how these can be integrated into their curriculums. Currently, the department does not have staff working on environmental education and interpretation programs and materials. Olympia's Water Resources Program provides environmental education and interpretation programs and materials focused on wetlands and stormwater management. The Olympia Parks, Recreation and Cultural Services Department and the Water Resources Program have combined efforts on such projects as the East Bay Park and Budd Inlet interpretation. For the department to serve environmental education and interpretation needs at Grass Lake, additional staff

time would be required. As proposed in the management plan section of the master plan, a refuge steward position would provide staff not currently available to implement these goals.

Teachers requested that a trail into the refuge be provided at the 65 Road and at Conger. They recommended fixed teaching stations so that "There is less trampling with the sampling." Because of class size, (approximately 45 including students, teacher and volunteers), a staging area is needed for the large group. From here they can divide into smaller groups or teams so they disturb the refuge less. This recommendation was combined with the need for shelter from the rain and a place to hold environmental camps, workshops and programs and evolved into the environmental learning shelter recommended in the master plan. Members of the group made recommendations for the amenities needed in the shelter as outlined in the design program.

The group also recommended the observation blinds. The forested shorelines and wetlands make bird and wildlife observations very difficult and also lead to shoreline trampling. Slightly raised observation blinds will provide better viewing and reduce disturbance.

Evergreen faculty requested permission to install a weather station, hydrologic monitoring stations and vegetation transects through the wetlands. They will contribute to the water monitoring program discussed in the management plan. They would also like to continue their bird monitoring project.

Some of the boldest and most innovative ideas were presented by Capital High School students who envisioned Grass Lake being used for art and writing classes as well as the more traditionally thought of environmental science activities. They also recommended evening programs in the refuge when there is not much being offered for teens to do. This idea was supported by the recommendation to utilize the environmental learning stations for nocturnal mammal observations.

Stream Team leadership expressed the desire for a facility to hold Stream Team events, workshops and day camps. Currently, they can do short-term events such as one day workshops or half day educational tours. An organized Stream Team could serve the restoration and monitoring programs recommended in the master plan.

Some members feel the people served the least currently by Grass Lake are adult visitors and the non-student public. In addition to a few Stream Team programs, the only known exceptions are the bird and butterfly programs offered by the local Black Lake Audubon Society.

## **G. The Department's Role**

The Department's role should be to provide facilities that facilitate environmental activities so that classes and programs do not fear getting lost or injured. The facilities should make using the refuge more convenient by having shelter from the rain and restrooms. The department should install environmental education and interpretation exhibits and offer environmental education and interpretive programs to serve the general public. The department should develop partnerships and solicit grants to help develop teaching and interpretive materials. Recommendations were made for a refuge steward who could organize and supervise volunteer naturalists to lead tours and programs and volunteer stewards to help with restoration, maintenance and monitoring. The department needs to explore ways to fund this position.

To help maintain the natural character of the refuge, interpretive signs or exhibits should be located at the trailheads and the trail intersections at the environmental learning stations rather than scattered throughout the refuge. The master plan map indicates recommended interpretive topics for these locations. Additional direction is provided in the following habitat-specific management recommendations section.