Planning Update #5
Nisqually National Wildlife Refuge

What’s New With Refuge Planning

Since the last planning update in April 1998, the planning team has continued with the scoping and analysis phase of the Refuge’s Comprehensive Conservation Plan (CCP). This plan, required by the National Wildlife Refuge System Improvement Act of 1997, will provide a framework for guiding future management decisions for the next 15 years. The draft plan will present management options related to habitat and wildlife, public use, and Refuge acquisition and expansion. Public comment will be solicited on the draft plan.

The Refuge’s Core Planning Team for this effort consists of Refuge staff, a planner from the Portland Regional Office, and a Duck’s Unlimited planning biologist. A technical team includes resource experts from the U.S. Fish and Wildlife Service’s Western Washington Office, Portland Regional Office, and Duck’s Unlimited. The Refuge’s planning process for the CCP will meet all requirements of the National Environmental Policy Act.

Workshops and Meetings Held

To gather more information in three areas critically important to the planning effort, the planning team conducted a Grasslands Workshop, a Public Use Workshop, and an Estuarine and Freshwater Wetlands Workshop during May and June. Local, regional, and national experts were invited to participate. All information gathered from these workshops will be used in developing the alternatives for the CCP. Look for a summary of each workshop in this planning update.

During the summer and fall, meetings and ongoing discussions were held with the Washington Department of Fish and Wildlife and the Nisqually Indian Tribe regarding management issues. Presentations were given to local groups and at a scientific meeting.

The Next Steps

Over the next several months, the Core Planning Team will be formulating alternatives and preparing a draft plan. All public comments will be considered in the development of the alternatives. If you have additional comments or would like detailed notes from any of the workshops, contact the Refuge by mail, phone (360) 753-9467, fax (360) 534-9902, or at the following internet address: fw@public_comments_nisqually@fws.gov.

Future planning updates will continue to keep you informed on the CCP process.

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Grassland Workshop Summary

A grassland management technical workshop was held May 13, 1998, attended by the Refuge planning team and several grassland/pastureland management experts. The workshop objectives were to: 1) review historical habitat management activities and wildlife use on grasslands; 2) assess current condition of grasslands and their ability to support Refuge goals and objectives; 3) discuss objectives of grassland habitat related to habitat diversity and wildlife use; and 4) develop recommendations for improved management activities to achieve wildlife and habitat management objectives.

Although not a native plant community, grasslands have been managed in the past to provide fall and winter browse areas for waterfowl, the most abundant waterfowl observed on the Refuge. Over the past 20 years, grassland management has included haying, planting, mowing, disking, and soil manipulation. Current management activities include haying and occasional mowing. Habitat quality has declined over time, because of the spread of invasive species including reed canary grass, increasingly wet conditions making management more difficult, and the reduction in intensive management.

Objectives and Strategies Discussed

Workshop participants brainstormed objectives and strategies for improving the quality of existing grasslands. They recommended the Refuge focus on grassland quality rather than quantity, managing a smaller area more intensively, particularly in drier portions of the Refuge. The general consensus was to manage remaining grasslands more intensively, interspersed with freshwater wetland areas and shrubs to achieve high quality foraging and nesting areas for aquatic birds, raptors, and other wildlife.

Participants discussed the need to develop a goal for grassland management on the Refuge and determine how it will tie into overall Refuge goals. Participants recognized the important role the Refuge might play in estuarine restoration in Puget Sound. If grassland habitats are included in Refuge goals, intensified management of grassland areas will be essential to provide higher quality habitat for waterfowl, raptors, passerines, and small mammals. Management techniques could involve multiple mowings starting earlier in the year, annual fertilizing, periodic seeding, and aggressive noxious weed control. It will probably be necessary to test soils regularly for pH, nitrogen, phosphorus, and potassium to determine if soil amendments are needed. Mowing again in the fall would provide improved food areas for wintering waterfowl. A combination of mowing, disking, water management, and herbicide application will have to be used to control dense reed canary grass areas.

Native Plant Enhancement

Participants discussed possibilities of managing native grassland species on the Refuge. It was decided that native grasslands were not a historic component and the soil type and environmental conditions at Nisqually do not make it possible for successful creation of native grassland. The non-native grasses would quickly out-compete native species.

Scattered shrub areas add some diversity to grasslands for wildlife. Shrub species diversity could be enhanced with plantings of a variety of native shrubs that provide food for birds. Additional methods to maintain scattered shrub

see "Grasslands" page 5
Public Use Workshop Summary

On June 2, 1998, Nisqually NWR hosted a Public Use Workshop. The purpose of the workshop was to gather input for the planning of future Refuge programs. All sixty-five workshop attendees represented a group or organization from the local community with specific interests in recreation, public use, and environmental education.

The workshop agenda included: 1) an overview of the Refuge's goals and purpose; 2) facilitated discussions by focus group to address current and future recreation and education programs; and 3) focus group presentations.

Workshop attendees participated in one of the following focus groups: 1) boating and kayaking; 2) hunting and fishing; 3) hiking, photography, and birdwatching; 4) outdoor recreation providers and planners; 5) tourism; and 6) environmental education. Every effort was made to include all groups and organizations in the community who have an interest in one of these areas.

Each focus group covered a variety of topics including, need for facilities, conflicts with other users, potential partnerships, changes in Refuge habitats that could affect recreational and educational opportunities, and the role the Refuge plays locally and regionally. A few of each groups' comments are presented here.

Selected Comments from Focus Groups

The boating group would like a place made available so they can get out of their boats, have lunch and use restroom facilities. More signing, especially in hunting and sanctuary areas, would be helpful.

Input from the hunters included the desire to have the state and federal lands managed the same. Hunters would like enhanced and additional areas to hunt but with restrictions on number of days and hunters to ensure a quality hunt. The fishers would also like to see enhanced and additional fishing areas and were particularly interested in the Refuge acquiring property south of I-5 for fishing access.

The hiking group said shorter trails were not a problem but wanted trails that accessed different habitats and provided excellent wildlife viewing opportunities. Overcrowding on the trails was a concern as were trail closures due to hunting; a compromise with the Brown Farm Dike Trail closure so wildlife viewers could get to this area during hunting season was requested.

The planners and providers suggested the role of the Refuge was providing natural habitat and a diversity of compatible public uses, with a strong emphasis on education, should be allowed. They emphasized the need to balance protection of the environment with people needs, particularly with continued growth of the area. Partnership ideas were suggested.

The tourism group would like to see the Refuge maintain the quality of the site while continuing to provide access. More signing, interpretation, and guided tours of the site are needed. Finding a balance was critical in order to continue to have sanctuary for people and wildlife.

The environmental education group would like to see a purposeful education program on a watershed stewardship theme. Access to all ecological features, training and materials, user-friendly facilities and tools, and outer trail restroom are all needed to improve the quality of the program. Participation in restoration and research as a means to educate citizens and students was also recommended.

The planning team will use this information to develop alternatives for the CCP.
Estuarine and Freshwater Wetland Workshop Summary

An estuarine and freshwater wetland workshop was held on June 29-30, 1998, attended by the Core Planning Team and several scientific experts. Objectives were to: 1) assess conditions of estuarine and freshwater wetlands; 2) discuss objectives of wetland management and restoration; and 3) make recommendations for wetland restoration and monitoring. The following summarizes their comments.

Objectives, Strategies, and Recommendations

Estuarine habitat has declined by 73 percent in the Puget Sound area. The Nisqually delta is one of the best remaining estuarine areas, yet its quality and quantity have been greatly reduced by diking, which has adversely affected juvenile salmon, other fish, and migratory birds.

The habitat in the diked interior was judged to require high maintenance, yet provide low value for waterfowl and other birds, because of the heavy vegetation, dense reed canary grass, and small proportion of wetlands. Dense vegetation reduces use by many birds, including raptors. Haying is providing habitat of limited value to birds and is a non-native habitat. Deep water areas with no flow in the diked interior are conducive to bullfrogs, which are detrimental to native amphibians.

Participants stated that the contribution of estuarine restoration at Nisqually NWR would be far greater than that of freshwater wetlands and recommended that it be maximized. There are many more options where freshwater wetland restoration could occur, for example upstream; whereas estuarine restoration can only occur here. There may be a shift in wildlife, but waterfowl, waterbirds, raptors, and salmon could all benefit.

Retaining some freshwater wetlands was recommended for diversity. Freshwater wetlands could be created in poor quality grassland sites. Remaining freshwater areas could be managed more effectively to increase bird use, including better water control, deeper water levels, and drawdowns to allow intensive management and reed canary grass control. Objectives should include: 1) increasing amphibian populations; 2) increasing waterbird and raptor use; 3) controlling reed canary grass; 4) managing for native plant communities; and 5) increasing riparian areas.

Participants recommended that approximately 75 percent of the diked interior be restored to estuarine habitat, by breaching dikes and using dike material to fill the borrow ditch, to prevent tidal flow from tunneling away from the restoration area. The Nisqually River should be restored to a more natural flow. Acquisition south of I-5 was recommended to improve tidal/freshwater habitat for fish rearing and migratory birds.

Grasslands could be managed more as seasonal wetlands and wet meadows. Remaining diked areas would be managed for seasonal freshwater habitats and ponds. Public access should be encouraged, for example, by building boardwalks on the center road and the south cross dike to McAllister Creek to provide opportunities for education and interpretation.

They did not recommend a muted tidal restoration design, where breaches are bridged to retain the dike system, because of their concern that muted systems provide insufficient tidal circulation and sedimentation, reduced nutrient flow and water quality, and cause fish entrapment. They said muted systems do not create the desired estuarine function, favor invasive species, are more costly and difficult.

See “Wetlands” page 5
New Refuge Buildings and Trail Start to Take Shape

It has been a time of change at the Refuge since early May when construction began on the new Refuge office, visitor center, and maintenance compound. Visitors took in stride a month-long closure in August and September and have been patiently adjusting to new ways of operating. Refuge visitors are now able to see what the new site will look like.

The entrance road and new parking lot are paved. The equipment storage building and shop are up. The office and visitor center are framed in and will soon have roofs. The grounds are being readied for the native landscaping that will surround the site. Construction of the new facilities is due to be completed in April.

In order to provide for the security of the construction site, new temporary Refuge hours have been established. The Refuge is now open daily from 7:30 a.m. to 6:00 p.m. The gate at the entrance to the Refuge is locked at 6:00 p.m.

Construction of the new Twin Barns Loop Trail is moving along with the hard work of two crews from the Washington Conservation Corps. When completed, this mile long interpreted trail will be fully accessible. The section of the trail from the Twin Barns to the Brown Farm Dike is open, as is the new observation platform at the Education Center. The other sections will be completed and open next spring.

If you have been to the Refuge recently you have probably noticed something else new at the Twin Barns. Storm damage to the barn roofs during the past 2 years required reroofing of both buildings. The construction crew will take 2 months to complete the project. For visitor safety, the Twin Barns Education Center will be closed most of December.

Your continued understanding with temporary signs and inconveniences during these construction projects is appreciated.

"Grasslands", continued from page 2
areas and control reed canary grass invasion include selective mowing, burning, or chemical application.

Monitoring Needed
Long-term monitoring was also discussed as a means for the Refuge to determine whether objectives are achieved on an annual basis. Monitoring programs could include: 1) regular soil testing; 2) plant surveys to determine species composition; 3) photo points; 4) documentation of management activities; 5) assessment of annual vegetation coverage from aerial photographs; and 6) assessment of aquatic migratory bird use on the Refuge.

The comments and recommendations received during this workshop will be considered when developing habitat management alternatives for the draft CCP.

"Wetlands", continued from page 4
to manage, and increase the risk of failure, as has happened elsewhere. They designed their recommendations to provide freshwater habitats and public access to all habitats, while maximizing native vegetation restoration and bringing the Nisqually delta a step closer to its historic natural system.

The group made monitoring recommendations to allow an adaptive management approach. Measures of success to achieve a high salt marsh community could include: 1) reduction of reed canary grass; 2) enhanced use by juvenile salmon in the first year; 3) most ponds being connected at low tides; 4) increased waterbird use; and 5) increased riparian habitat and reduced loss to erosion.

The results of this workshop will be considered in the development of CCP alternatives.
The Planning Process

Developing a comprehensive plan usually takes several years to complete. This process can be divided into a series of steps. We are currently in Step 2.

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1. Scoping and Analysis
2. Plan Formulation
3. Publish Draft CCP
4. Implement Plan
5. Final CCP

- Analyze comments
- Revise plan
- Issue "Finding of No Significant Impact" (FONSI)
- Prepare step down plan
- Acquire permits
- Take action

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U.S. DEPARTMENT OF THE INTERIOR
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Address correction requested