

Environmental Assessment
Proposed Construction and Operation of Refuge Facilities at
Dungeness National Wildlife Refuge

August 2007

SECTION 1. PURPOSE OF AND NEED FOR ACTION

1.0 Background

Dungeness National Wildlife Refuge (Refuge) is managed by the U. S. Fish and Wildlife Service (Service) under the Department of the Interior, and is a unit of the National Wildlife Refuge System (System).

National Wildlife Refuge System Mission and Goals:

The mission of the National Wildlife Refuge System is: (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd-668ee]):

“To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

The goals of the National Wildlife Refuge System are (601 FW 1):

- Conserve a diversity of fish, wildlife, and plants and their habitats, including species that are endangered or threatened with becoming endangered.
- Develop and maintain a network of habitats for migratory birds, anadromous and interjurisdictional fish, and marine mammal populations that is strategically distributed and carefully managed to meet important life history needs of these species across their ranges.
- Conserve those ecosystems, plant communities, wetlands of national or international significance, and landscapes and seascapes that are unique, rare, declining, or underrepresented in existing protection efforts.
- Provide and enhance opportunities to participate in compatible wildlife-dependent recreation (hunting, fishing, wildlife observation and photography, and environmental education and interpretation).
- Foster understanding and instill appreciation of the diversity and interconnectedness of fish, wildlife, and plants and their habitats.

Dungeness National Wildlife Refuge Purposes and Objectives:

Dungeness National Wildlife Refuge was established by Executive Order 2123 on January 20, 1915 for the purpose of "...a refuge, preserve, and breeding ground for native birds..." under management of the Federal Government (Appendix A). On May 29, 1943, the State of Washington granted a Use Deed to the U. S. Fish and Wildlife Service for all of the second class tidelands associated with Dungeness National Wildlife Refuge (Appendix B). On March 6, 1971, approximately 45 acres and on March 25, 1972 approximately 29 acres of forested upland were acquired by the U.S. Government, under the Refuge Recreation Act, for addition to Dungeness National Wildlife Refuge. Under that act, these lands are "...suitable for: (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, and (3) the conservation of endangered species..." Five acres were purchased and added to the Refuge in 1996 to facilitate the replacement/relocation of the administrative facilities and provide a buffer to the refuge (Appendix C) (USFWS 1997). The National Wildlife Refuge System Administration Act requires that refuges be managed to achieve refuge purpose(s) and further the System mission.

Dungeness National Wildlife Refuge Objectives:

- To provide and preserve habitat for the enhancement of wintering waterfowl and other migratory birds with emphasis on black brant.
- To protect and maintain natural habitats capable of supporting a diversity of wildlife.
- To provide public information, interpretation, and education on the wildlife resources of the Refuge.
- To provide wildlife-oriented recreation.
- To cooperate with other agencies, educational institutions, and private organizations and individuals in providing technical assistance and research opportunities consistent with Refuge objectives and management needs.

Dungeness National Wildlife Refuge is administered from the Washington Maritime National Wildlife Refuge Complex office at 33 South Barr Road, Port Angeles, WA. The Complex includes six refuges: Dungeness, Protection Island, San Juan Islands, Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges. With the exception of two small islands in the San Juan Islands, Dungeness National Wildlife Refuge is the only refuge in the complex with public use. Currently, five full-time personnel work out of the small shop and office. Dungeness also has a large volunteer program of more than 80 people. A resident volunteer remains on Dungeness for up to one year, living in a small cabin within the forest overlooking the spit.

1.1 The Proposed Action

The U.S. Fish and Wildlife Service proposes to construct a replacement office, shop and storage building at the end of Holgerson Road on Dungeness National Wildlife Refuge to

better manage the Refuge and provide increased accessibility to the visiting public (Figure 1).

1.2 Need and Purpose for the Proposed Action

The present Refuge Complex office and shop are located along Highway 101, approximately 6.5 miles from the Refuge. This portion of Highway 101 is scheduled to be widened from a two lane road to a four lane road by the Washington Department of Transportation in 2009. This action will result in the demolition of the Service's facilities located there. Dungeness National Wildlife Refuge receives nearly 100,000 visitors a year and would be more effectively managed by having staff located on the Refuge and accessible to the visiting public. At present, there are no facilities for staff and volunteers at the Refuge. This creates a serious inconvenience for visitors and volunteers. For example, the public must travel more than 6 miles to purchase entrance passes; such as the annual pass or America the Beautiful Pass. Horseback riders who want to use the horse trail need to call days ahead of their planned ride, so that someone can be available to travel to the Refuge to open the trail if a volunteer is not on duty. In addition, the location of the Refuge makes cell phone reception difficult, if not impossible on many locations near the entrance station. The public or volunteers are often not able to quickly reach the office to request information or receive assistance in an emergency. Thus, the purpose for the proposed action is not only to replace facilities that will be lost to highway construction, but to provide increased accessibility to the visiting public; and more efficiently and effectively manage the Refuge for achievement of Refuge purposes, goals, and objectives.

1.3 Public Involvement

In an attempt to inform interested parties of the Service's plans to relocate its administrative facilities to Dungeness National Wildlife Refuge and amend the Official Comprehensive Plan Map and Zoning Map to reflect more accurately that the Refuge be zoned Public (P), public hearings were held by the Clallam County Planning Commission on January 16, 2002 and February 6, 2002. Subsequent to these meetings, the County determined that local jurisdictional authority is preempted on federal lands managed for public purposes (Appendix D). A number of concerns were submitted and were summarized in the Commission's Finding of Fact that was forwarded to the Service.

Issues Associated with the Proposed Action:

The following issues were identified during public scoping of the proposed project. All of the issues identified below are described and analyzed in the following sections of this environmental assessment.

Issue 1. A number of Refuge neighbors believed that it was inappropriate for the Service to construct "professional offices" in an area zoned by Clallam County as Rural Residential

Issue 2. There is concern that the Service would use Holgerson Road as an access for the public to get to the Refuge with a many times increase in traffic through a rural residential area.

Issue 3. There is concern that the proposed construction and operation has the potential of significantly affecting the aesthetic rural residential quality of the neighborhood.

Issue 4. There is concern that users of the public facility/lands would trespass onto neighboring private property.

Issue 5. There is concern that development would have a significant impact on wildlife using the area, specifically to the bald eagle and black-tailed deer.

SECTION 2. ALTERNATIVES INCLUDING THE PROPOSED ACTION

Alternative A. (No Action Alternative)

Under this alternative the Service would not construct the proposed project at the end of Holgerson Road on Dungeness National Wildlife Refuge. The area would continue to be managed as open grassland with no development. The parcel would continue to be within the boundaries of Dungeness National Wildlife Refuge and, as such, should be appropriately zoned Public (P) to reflect correct land status. Refuge facilities would have to be constructed elsewhere.

Alternative B. Construct Replacement Administrative Facilities on Refuge Lands at the End of Holgerson Road. (Preferred Alternative)

The Service would construct Refuge administrative facilities on approximately 5 acres of grassy Refuge land, bordered on the west by Dungeness Recreation Area County Park and on the east and south by rural residential development at the end of Holgerson Road (Figure 2). This land was added to the Refuge to relocate the administrative facilities and provide a buffer to the Refuge from residential development. Development would consist of building an access road from Holgerson Road, an approximately 3700 square foot office, and a 3600 square foot shop. An equipment storage building would be added later as funds become available. In addition utilities (for example power, water, and telecommunications) would be buried in two locations: one adjacent to the Holgerson Road access and the other from the west side up to the County park water line. Refuge staff would be in closer proximity and more available to the visiting public. Four Service employees would arrive at the facility at times ranging from 6:00 a.m. to 8:00 a.m. and leave between 4:00 p.m. to 5:30 p.m. Monday through Friday. One additional employee, a Park Ranger, may arrive and leave at different times depending on time of year and when the Refuge is open to the public. This employee would also access the facility on the weekends. One to four vehicles may travel to and from the site in order to carry out duties at other Refuge locations. Periodic deliveries from UPS, Fed Ex, etc. would occur. Boats would occasionally be trailered to and from the facility. Public access to the facility would continue to be through the Refuge parking lot via Voice of America Road.

The Service has designed and would site the facilities to minimize impacts to the adjoining neighborhood. Development would occur in the north and northwest part of the property, as far away as possible from neighboring property lines. Buildings would architecturally blend with the character of the area, be single story, and use materials and color schemes to blend with the environment. Landscaping would be developed to reduce visual impacts. A fence would be constructed along the south and east boundary of the property and a gate would be placed to limit access from Holgerson Road. The visiting public would continue to access the facility from the Refuge's parking lot on Voice of America Road with Holgerson Road used only by Refuge staff and for deliveries (U.S. Mail, UPS, Fed Ex, etc.). Holgerson Road would also provide access to the area for a limited time during construction of the facilities. The Service would contribute its fair share in the maintenance of Holgerson Road from the north end of the County road to the Refuge. The unimproved portion of Holgerson Road north of the end of the County maintained portion is owned in community by the landowners who access their property from it. Maintenance is the combined responsibility of all those accessing landowners. As part of the construction process, the Service would chip seal the unimproved portion to the Refuge property line. In future years, maintenance of this part of the road would be "community" responsibility.

Alternative C. Construct Replacement Administrative Facilities on Refuge Lands and Access through Clallam County Dungeness Recreation Area.

The Service would construct the Refuge administrative facilities on approximately 5 acres of grassy Refuge land, bordered on the west by Dungeness Recreation Area County Park and on the east and south by rural residential development. This land was added to the Refuge to relocate the administrative facilities and provide a buffer to the refuge from residential development. Development would consist of building an approximately 3700 square foot office, and 3600 square foot shop and two vehicle access routes. One access route would be from the north end of Holgerson Road, and a second would pass through Dungeness Recreation Area County Park from Voice of America Road (Figure 3). An equipment storage building would be added later as funds become available. In addition utilities (for example power, water, and telecommunications) would be buried in two locations: one adjacent to the Holgerson Road access and the other from the west side up to the County park water line. The Holgerson Road access would be used during construction, for deliveries and for emergency purposes only, while the road through the County Park would function as a service road and staff access. The visiting public would access the facility from the Refuge parking lot via Voice of America Road. Refuge staff would be in closer proximity and more available to the visiting public. Four Service employees would arrive at the facility at times ranging from 6:00 a.m. to 8:00 a.m. and leave 4:00 p.m. to 5:30 p.m. Monday through Friday. One additional employee, a Park Ranger, might arrive and leave at different times, depending on the time of the year and when the Refuge is open to the public. This employee would also access the facility on the weekends. One to four vehicles might travel to and from the site to carry out duties at other Refuge locations. Boats would occasionally be trailered to and from the facility.

Other Alternatives Considered but Eliminated from Further Study

The Service considered building off the Refuge but there was no funding to purchase additional building sites. Management would be less efficient due to not being on-site and the visiting public would not have ready access to refuge staff. The Service considered renting existing facilities on non-Refuge lands, but determined that the long term cost of renting are greater than building facilities on refuge-owned lands. Again, the visiting public would not have ready access to staff on-site and management would be less effective. The Service considered building on a different area of the Refuge but the potential environmental impacts would be greater than the proposed building site.

SECTION 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Physical Environment

The 5-acre rectangular parcel (Figure 4) is situated within the southeast corner of Dungeness National Wildlife Refuge. It is bordered on the east and south sides by private property. The west side borders Clallam County and is part of the Dungeness Recreation Area, except for the northwest 150' that borders land leased to U. S. Fish and Wildlife Service and is used as an overflow parking lot for the Refuge. The north boundary of the parcel is contiguous with the Dungeness National Wildlife Refuge.

The parcels on the south and east sides are open grassland interspersed with some conifer trees. The private parcel (#230020) on the south border has a residence, storage buildings, and is circled by a dirt track for off-road vehicles. The second closest residence (parcel #239180) is at the far southeast corner just before the Refuge parcel begins. A parcel designated as open space for the Deer Trails Homeowners Association, which is a development of about 20 acres to the west, also edges the southeast right-of-way to the site. The private property to the east (parcel #239160) has a small wooden storage shed, but no residence. Four other residences within the area have limited views of the site. A County trail used for hiking, bikes, and horseback riding follows the west side border of the site and is screened by shrubs, and coniferous and deciduous trees.

The elevation is about 130' above mean sea level and the topography is relatively flat on the westside with the eastside sloping downwards to the east. Situated in the rain shadow of the Olympic Mountains, the rainfall is about 17" per year. Neighborhood air quality is predicted to be very good because of the low level of automobile and gas powered equipment exhaust and lack of any industry.

The soil type is Hoypus gravelly sandy loam (NRCS 2005). This soil type is somewhat excessively drained and has moderately rapid permeability in the A horizon and very rapid permeability in the Bw and C horizons. Therefore, water flows quickly through this soil. Clallam County has designated the site as a critical aquifer recharge area. "A critical aquifer recharge area is defined as a geographical area which contains hydrogeologic conditions that provide the recharge to an aquifer(s) which is a current or

potential potable water source and, due to its geological properties, is highly susceptible to the introduction of pollutants, or because of special circumstances, has been designated as a critical recharge area in accordance with Washington Administrative Code 365-190-080 by Clallam County” (Clallam County 2007).

Environmental Consequences

Under Alternative A, the building construction would not occur; and thus, there would be no impacts from construction or operation of facilities on the physical environment.

Under Alternative B there would be construction of and subsequent operations of replacement office, shop and storage building. During construction, equipment and material staging areas would be identified to minimize soil disturbance and compaction on the parcel. The collective footprint of the facility: buildings, parking lot, vehicle access routes, utility right of way, etc. would occupy about two acres. The combination of dry wells to capture runoff from buildings and careful landscaping with native plants would result in minimal drainage effects and no soil erosion. Disturbed areas would be revegetated with native plants. It is anticipated that traffic use would be increased Monday through Friday to 10–15 trips per day. Weekend and holiday use would be generally limited to one staff person’s access. Therefore, the minimal increase in traffic would not significantly affect local air quality.

Currently, there is little human noise at the site and infrequent use by people walking through the site to the Refuge entrance. During construction, the project site would be subjected to an increase in noise and activity. When construction is completed the noise and activity would be diminished greatly; however, it would remain slightly above the level prior to development due to use of the headquarters and maintenance area by vehicles and people.

The maintenance building would use and store a small volume of hazardous chemicals, which includes paints, petroleum-based products, and solvents. All chemicals used would be stored and disposed of according to their individual Material Safety Data Sheet requirements as designated by the Occupational Safety and Health Act. Vehicles and boats would be serviced on-site in the shop building using approved spill prevention procedures. Vehicles and boats would be washed on a concrete pad with drainage through a filter to an approved site. Thus, impacts from storage or use of chemicals are not expected to occur.

Under Alternative C, the expected impacts from construction and use of the facility would remain the same as in Alternative B. In addition, there would be an increase in the area impacted in order to construct a main access road from the Voice of America Road to the facility. The construction of approximately 500' of road would require the removal of some native trees and shrubs and result in compacting soils and some changes in drainage. Road placement would be selected to minimize removal of large trees and significant species, such as the Pacific madrone (*Arbutus menziesii*).

3.2 Wildlife and Wildlife Habitat

The human use of the site is not known, but it appears to have been cleared of trees and originally resembled the adjacent forest area north of the site. Use of fire is unknown. Currently the site is open grassland with Douglas fir (*Pseudotsuga menziesii*) and grand fir (*Abies grandis*) reestablishing the north and west boundaries. Strawberry (*Fragaria spp.*) covers much of the site. The Refuge area to the immediate north is representative of the dry Puget Sound lowland forest and includes Douglas fir, Grand fir, Pacific madrone, (western redcedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), willow (*Salix spp.*), salal (*Gaultheria shallon*), red elderberry (*Sambucus racemosa spp. pubens*), oceanspray (*Holodiscus discolor*), Indian plum (*Oemleria cerasiformis*) and dull Oregon-grape (*Mahonia nervosa*).

The past clearing of the project site has created an edge between the forest and grassland. A number of species have been observed using the project site and the forest edge, such as: song (*Melospiza melodia*) and savannah (*Passerculus sandwichensis*) sparrows, spotted towhee (*Pipilo erythrophthalmus*), garter snakes (*Thamnophis spp.*), Douglas' squirrel (*Tamiasciurus douglasii*), Townsend's chipmunk (*Tamias townsendii*), and deer mouse (*Peromyscus spp.*). Five large western thatching ant (*Formica obscuripes*) mounds attract northern flickers (*Colaptes auratus*).

Environmental Consequences

Under Alternative A, there would be no immediate change in the wildlife use of the site. Neighbors currently cross the site to the Refuge entrance resulting in minimal wildlife disturbance. This would likely continue if no action is taken

Under Alternative B, some species, such as savannah and song sparrows and northern flickers would be disturbed and temporarily displaced during periods of construction activity. Most, such as garter snakes and deer mouse would temporarily relocate on other, nearby areas of the Refuge and many should return when construction is finished. Some would take longer to relocate, such as the western thatching ant. The prominent ant mounds would be destroyed; however, other areas within the 5-acres would be left undisturbed where the ants could recolonize. Construction on the parcel would eliminate the natural progression of shrub and tree regeneration on the building site. However, natural progression would occur on other areas of the parcel and be augmented by some selective planting and seeding of species with high wildlife values, such as Garry Oak [*Quercus garryana*] and red paintbrush [*Castilleja miniata*].

Under Alternative C, wildlife impacts during the construction and use of the facility would mostly remain the same as Alternative B. Building the access road from Voice of America would remove some vegetated habitat favored by forest and shrub associated species, such as Bewick's (*Thryomanes bewickii*) and winter (*Troglodytes troglodytes*) wrens, golden-crowned (*Regulus satrapa*) and ruby-crowned (*Regulus calendula*) kinglets, Wilson's warbler (*Wilsonia pusilla*) and hairy woodpecker (*Picoides villosus*). Birds would be displaced during road construction and some nesting habitat would be lost.

The following three species have been identified by the staff or public scoping to be of concern for disturbance and will be discussed further.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle is protected by the Bald and Golden Eagle Protection Act of 1940 as amended in 1962 and the Migratory Bird Treaty Act. The nearest bald eagle nests are off the Refuge about 1 mile away. Bald eagles regularly use the tallest trees and snags in the adjacent Refuge forest area for perching, roosting and feeding. Bald eagles do not regularly use the site for foraging.

Under Alternative A, the current level of noise and activity that bald eagles have habituated to at the site would continue.

Under Alternative B, noise and activity levels at the site would cause temporary disturbance to bald eagles and, probably cause the eagles to avoid the forest area during time periods with active construction. Bald eagles might not return to perch in the larger trees and snags closest to the buildings, but potentially might become habituated to the activity level of the headquarters and return to their former use near the buildings.

Construction work would be scheduled within the wintering and nesting period for bald eagle. During the breeding period, construction would be carried out at a distance greater than 800 meters from eagle nests and thus, would have no expected impact. During wintering activity periods, construction would take place within 400 meters of bald eagle use areas causing some minor disturbance. More critical shoreline perch areas would not be affected by the construction.

Under Alternative C, additional minor effects to bald eagles would be expected. Any removal of large trees to construct the access from Voice of America Road would reduce available perching and roosting sites.

Columbia Black-tailed Deer (*Odocoileus hemionus columbianus*)

Black-tailed deer are abundant in the Sequim-Dungeness area, including the local community surrounding the site and on the Refuge. Although many residents enjoy viewing the deer, the abundance has created some problems and homeowners in the community must build deer fences to protect gardens and deer-preferred ornamentals.

Deer often become very habitual in their activities traveling along established pathways. They show up at the same time and follow the same trails, taking paths of least resistance. Although deer may be active at any time of day, they are most active near dawn and dusk (a pattern of activity called "crepuscular"). Typically, deer feed in open habitats such as meadows and clearcuts, retreating to more secure areas, such as thickets and closed canopy forests, to rest and chew their cud (WDFW 2004).

Under Alternative A, deer use of the area would continue without interruption.

Under Alternative B, the project construction would have a minor, short-term impact on deer feeding and traveling through the site. However, deer on the Refuge have acclimated to human presence and allow people to approach relatively close. It is anticipated that the deer would likely choose alternative trails to the forest during daytime construction activity. Once the project was completed, the deer would be expected to return to their former use of the site on the area left undeveloped.

Under current Dungeness National Wildlife Refuge policy, vehicles on the Refuge trails being used by staff or volunteers must maintain speeds of less than 10 mph. Extreme caution is taken to not harass or injure wildlife sharing the trails. This policy protects deer from being injured by motorized vehicles. Thus impacts to the local deer population from the construction and operation of the new facilities would be expected to be minor to negligible.

Under Alternative C, the minor impacts to deer-compared to Alternative B- would be only slightly increased within the area of the additional access road due to loss of forest and shrub cover.

Cooper's Hawk (*Accipiter cooperii*)

A pair of Cooper's hawks has been nesting in the trees just north of the site for at least 10 years. The hawks move their nest annually, but remain in the same relative area. During the breeding season, one hawk is often observed at the top of the large snag at the northern edge of the project site. This bird is probably a sentry to the nest territory.

Cooper's hawks are woodland raptors and can be found in both suburban and urban habitats. They capture a variety of prey, mainly birds and small mammals, such as rodents. British Columbia research reports the dates for first clutches at April 27 through July 24. Although populations in a few eastern states are designated as threatened or endangered, breeding populations in the western states are believed to be healthy (Curtis et al. 2006).

Under Alternative A, the Cooper's hawks would continue to use surrounding habitats as described above.

Under Alternative B, construction activities would disturb the Cooper's hawks and displace them from perching in the snag. There is a possibility that the Cooper's hawks would abandon nesting in their traditional area during 2008. This might depend on the construction phase and the subsequent level of activity that would occur during the 2008 breeding season. However, Cooper's hawks are known to nest in small patches of suitable habitat in urban and suburban areas and would be expected to tolerate activities associated with the day-to-day operations of the facility (Curtis et al. 2006).

Under Alternative C, similar level of effects as Alternative B would be expected by the facility construction. Constructing an access road from Voice of America Road would

create an additional minimal impact by displacing their bird prey species and removing perching trees.

3.3 Cultural Resources

An archaeological survey was done by the U. S. Fish and Wildlife Service cultural resource specialists in 2006. The survey returned negative results. With completion of field work and determination of negative findings, the proposed project can be considered in compliance with Section 106 of the National Historic Preservation Act (NHPA) and can proceed as planned.

Environmental Consequences

Under Alternative A, the site and, subsequently, associated cultural resources would not be disturbed.

Under Alternatives B and C, if cultural resources were discovered during the implementation of the project, ground disturbing activities would be halted and the Regional Archaeologist notified.

3.4 Public Use Administration

Dungeness National Wildlife Refuge is located on the Olympic Peninsula, which boasts some of the most beautiful scenery in the United States. Minutes from the Refuge are the gateways to Olympic National Park, Olympic National Forest, and the car ferry to Victoria, Canada. Dungeness National Wildlife Refuge is considered one of the longest natural sand spits in the world and is a popular destination site for American and international travelers. In addition, the Refuge provides one of the few accessible public access points to a sandy beach in the Puget Sound and is extremely popular to local residents. Adjacent to the Refuge is Clallam County's Dungeness Recreational Area campground, which is managed by Clallam County Public Works Department. During summer months, the County campground is filled to capacity. Both visitors and local residents combine hiking the County's recreational area trails with visiting the Refuge. Clallam County staff cooperatively assists the Refuge responding to maintenance and emergency calls. Dungeness Bay is also famous for recreational crabbing and shellfishing and the New Dungeness Lighthouse, located ½ mile from the tip of the spit, is a national historic site and symbol for the Sequim/Dungeness community.

Of the approximate 100,000 yearly Refuge visitors, about 60% visit the Refuge between May and September (USFWS 1997). In July and August, daily more than 500 people often enter the Refuge. Also, about 50 schools and organizations annually use the Refuge for educational activities. Refuge staff is not at the Refuge every day.

The travel industry is a major generator of employment and spending in Clallam County. Runyon and Associates (2006) reported 3170 jobs in travel and \$166.8 million in total direct travel spending for Clallam County in 2005. Direct travel spending has increased 4.4% from 1991 to 2005. Research completed on Ridgefield National Wildlife Refuge, a

Refuge with comparable visitor numbers located in Washington State, showed that the Refuge visitor recreation expenditures in the Ridgefield community were about \$1.3 million per year. (USFWS 2005).

Environmental Consequences

Under Alternative A, the administrative facility would remain off-site and Dungeness National Wildlife Refuge would continue to have days with no staff presence. Also, the high number of Refuge visitors creates the need of a ranger to protect wildlife and habitat and provide a safe environment for the public. Currently, the ranger would be required to continue to travel to the Refuge from another location and, subsequently would not be quickly available to respond if needed. In addition to the ranger, it is more efficient to manage the Refuge by being located on the Refuge. If the administrative facility remained located at another location, staff would have to continue traveling to the Refuge. In addition, Clallam County park personnel, who are in close vicinity at the recreational area, would continue to spend a portion of their time providing emergency support and maintenance to the Refuge.

Under Alternative B, an administrative site located at the Refuge would result in more efficient management and serve as a point of contact to Refuge visitors. Refuge staff and volunteers would be more available to assist visitors to the Refuge and provide information and wildlife interpretation. As explained above, new Refuge facilities must be located somewhere in the vicinity for effective natural resource and public use administration. Visitors would continue to frequent the refuge regardless of where the refuge facilities were located. Thus, there is not expected to be any difference in economic effects to the local economy or community. However, as noted above, the efficiency and effectiveness of public use administration would differ depending on the location of the Refuge facilities.

Having an administration site located at the Refuge would also result in improved cooperation with the adjacent county Recreational area and free their on-site personnel from having to respond to emergency calls and maintenance on the Refuge.

Under Alternative C, effects to public use administration from siting the facility would be the same as those under Alternative B because in both cases the new facilities would be located on the Refuge. However, development of the access from Voice of America Road would require vehicles to cross a trail designated for horseback riding and hikers. This would result in a disturbance and increased hazards to county trail users. Signs would need to be posted to reduce potential hazards of vehicles crossing trail.

3.5 Site Aesthetic Conditions

As described in Section 3.1, the project area is adjacent to a rural residential area. The local area is mainly open space with few roads and scattered buildings. Four residences within the area have limited views of the proposed building site. A County trail used for hiking, bikes, and horseback riding follows the west side border of the site and is screened by shrubs, and coniferous and deciduous trees.

Environmental Consequences

Under Alternative A, the view of the site would not remain static. Although no buildings would occur, the parcel is naturally converting to forest and over time the proposed building site would convert from a largely open site to closed forest. Traffic on Holgerson Road would stay at current levels until additional rural residential development took place. Trespass to private property through this parcel, if any, would continue at present levels.

Under Alternative B, constructing and locating the administrative and maintenance buildings on the proposed site should have a minimal impact on the local neighborhood. The building design would be architecturally pleasing and compatible with the character of the community. The buildings would be sited in the north and northwestern portion of the property to stay as far away as possible from neighboring property lines. In addition, the site would be fenced and naturally landscaped so as to not detract from neighbors views and to prevent trespass on to adjacent private properties. Noise levels would modestly increase during office hours, but probably not be heard except from the closest neighbors. Traffic would be increased in the short-term during construction. After construction is completed, traffic on Holgerson Road would be slightly increased by Refuge staff accessing the facility and occasional deliveries and would not be expected to adversely affect the community.

The increase in public traffic to the facility through the Voice of America Road would be slight. About 10-15 public vehicles access the current facility weekly. This would be a minimal impact to the County Recreational Area.

Under Alternative C, constructing and locating the administrative and maintenance buildings on the proposed site should have the same minimal impact on the local neighborhood as Alternative B. The vehicle access from Voice of America Road would not be visible to the neighborhood, and thus, not impact aesthetic conditions. After construction was completed, the limited use of Holgerson Road by the rare delivery or emergency vehicles would result in almost no change in traffic from the current level.

A vehicle access from Voice of America Road would remove vegetation from the County Park and create an additional road. This would negatively impact park visitors' trail experience.

3.6 Environmental Justice

No one group or Tribe represented in the community would be disproportionately impacted by building the administrative facility on the parcel. Thus, Alternatives A, B or C would not result in any environmental justice issues.

3.7 Cumulative Effects

The Sequim-Dungeness community is growing rapidly, and, predicatively, local need for access to shorelines and open spaces will increase. Clallam County is currently in the process of developing a master plan for Dungeness Recreation Area County Park. The Service will be starting a Comprehensive Conservation Plan for Dungeness National Wildlife Refuge in 2008 that will direct the management of the Refuge for the following 15 years after implementation.

Environmental Consequences

Under Alternative A, not building the administrative building on the parcel would not insure that the wildlife currently using the area would remain undisturbed. Additional parcels, including the adjacent parcel to the east, are already subdivided for residential homes. The construction of these residences would each add disturbance to the wildlife using the site and the edge of the forest. In the absence of available Refuge staff, the County Park personnel would continue to provide support for emergency calls and maintenance on the Refuge. Potentially, this will require an additional personnel position for the County.

Alternative B would result in a short-term disturbance to wildlife, the adjacent County Recreation Area, and the neighborhood community and use only a portion of the 5- acre parcel. However, if the need for additional administrative or maintenance space was required in the future, more building might be developed on the parcel. Although current federal budgets do not support hiring additional staff, a potential for additional staff and road use exists. When combined with the potential development of additional residences adjacent to the site, the potential for wildlife disturbance increases more. None-the-less, the local effects – through destruction of habitat and disturbance of wildlife – would be localized and effects County-wide or at a population level would likely not be measurable.

Under Alternative C, in addition to the cumulative impacts of Alternative B, an additional access would be created with further fragmenting of the forest habitat. As the population grows, especially in the Puget Sound and local community, visitation to the Refuge will also continue to increase as people seek areas to experience wildlife and natural places. The inefficiency of managing the Refuge from a distance will place other more sensitive species, such as breeding seabirds and migrating waterfowl and shorebirds, at risk for increased disturbance from visitors.

Based on the analysis above and in the context of anticipated local and regional population increases and concomitant land development and use, the proposed construction and operation of the refuge replacement office, shop and storage building does not represent a significant impact on the human environment.

SECTION 4. PREPARERS AND REVIEWERS

Name	Position	Degrees	Experience
Kevin Ryan	Project Leader	BS, Wildlife Science	34 years USFWS
Pam Sanguinetti	Biological Technician	BS, Environmental Science MA, Environmental Studies	13 years USFWS
Ben Harrison	Branch Chief Refuge Planning	BS Natural Resource Management MS Plant and Soil Science	24 years USFWS
Steve Moore	Regional Office Division Chief	BS, General Biology MA, Natural Resources Planning and Management	3 years Corps of Engineers 30 years USFWS
Linda Watters	Refuge Supervisor	BS, Biology MS Wildlife Zoology	1.5 years USFS 29 years USFWS

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