
Recommended Management Guidelines

- Introduction -

Part II



Introduction

The San Juan Islands constitute a unique and irreplaceable resource for the people of the State of Washington and the residents of San Juan County. The conservation and wise use of the islands depend on both public and private land use and management decisions. For the past year, the 12-member San Juan Islands Trust Land Advisory Committee has worked to develop the following recommendations for the most appropriate uses and management of nearly 2,500 acres of Department of Natural Resources-managed Common School Trust Land in the County.

The Department of Natural Resources and Its Role in San Juan County

Created in 1957, the Department of Natural Resources (DNR) manages various Trust Lands throughout the state. The act creating the DNR also named a five-member Board of Natural Resources to set policies and oversee management of the various trusts. The Commissioner of Public Lands is the elected administrator of DNR.

DNR manages over 2 million acres of forest land and nearly one million acres of agricultural land in the State of Washington for the benefit of specific institutions such as public schools, the University of Washington, and Washington state University. In addition, the agency manages 2 million acres of state land located below the mean high water line under a Public Trust doctrine for the benefit of the general public. DNR also administers recreational facilities that provide opportunities for citizens to enjoy public lands with only modest improvements, such as "primitive" campgrounds, marine parks, picnic areas and educational interpretive sites. In addition to fire control on state and private forest land, DNR administers the Forest Practices Act, provides "primitive" recreational opportunities, manages the Natural Area Preserve System and performs many other proprietary and regulatory functions.

In San Juan County, DNR currently manages 26 upland properties totaling 2,483 acres. This land represents only about 0.1 percent of the State Trust Land base but 2.3 percent of all land within San Juan County. DNR lands in San Juan County are located on six islands as shown on the location map on the cover of this report. Their use and status is

summarized in the attached table on page 5. Twenty-two of the properties are "Common School Trust Lands" with limitations on their disposition as described in the following section. Three of the properties were purchased for public recreational use and do not have income-producing trust requirements.

During the past 20 years, there has been little management activity on many of these properties. Some properties, however, have had substantive management activity, much of which has been recreational leases and development. Some timber management and an agricultural lease has also occurred.

The Special Role of DNR Lands

When the State of Washington was created by the Enabling Act of 1889, a land-rich, money-poor federal government gave the state over 3 million acres of land to be held in trust for the support of public institutions. In each township Sections 16 and 36 (2 square miles) were granted for the "support of the common schools" (Grades K-12). In addition, when these sections were already appropriated for military or Indian reservations, the state could pick replacement parcels or "lieu lands." The State Constitution established the Common School Construction Fund (Article IX) to receive the fair market value of proceeds from the sale, lease or management of School Trust Lands to finance the construction and renovation of school facilities in the state.

In contrast to many other western states, which sold their Trust Lands and put the proceeds in a permanent fund, Washington has maintained approximately 70 percent of its original grant lands. Unlike other states where general tax revenues or local bond issues must raise money for new school construction, Washington is unique in having a dedicated trust fund to provide matching monies for local school construction.

Over the years the U.S. Supreme Court and various state supreme courts have consistently ruled that the designated institution must be the primary beneficiary of any proceeds from these lands. For instance, if a state park, a Natural Area Preserve or a school playground is created from Trust Land, the Trust must be reimbursed for the fair market value of the land.

The most recent interpretation of the obligations of Trust Land management was defined in the Washington Supreme Court decision regarding the recent "Timber Relief" law of

[Table 1, San Juan Islands Trust Land—Current Management Status,
is overleaf on pages 5A and 5B]

Table 1. Trust Land Management Project Proposed Schedule.

San Juan Islands Trust Land—Current Management Status.¹

Site (Number, Name)	Acres	Classification	Water- front (feet)	SMP ² Desig- nation	Comp Plan ³ Desig- nation	Proposed Comp Plan ³ Desig- nation	Year Acquired	Current Management Status
Orcas								
1 Point Doughty	56.5	School Trust	5,904	N	N	N	1962	Recreational Lease (2.6 acres) Recreation Lease (5.6 acres) Timber Trespass
2 Buck Mountain	80.0	School Trust	-0-	— ⁴	C	C	1933	
3 Raccoon Point	69.3	School Trust	3,253	C	C	C	1889	
4 Mt. Pickett	160.0	School Trust	-0-	—	C	C/N	1958	
5 Point Lawrence	108.0	School Trust	5,485	C/N	C/N	C/N	1963	
6 Obstruction Pass	83.0	School Trust	3,460	C	C	C	1889	
7 Buck Mt. West	260.0	School Trust	-0-	—	C	C	1961	
8 Turtleback	80.0	School Trust	-0-	—	C	R/TA-10	1959	
9 Cormorant Bay	31.4	School Trust	1,365	C	C	C-10	1889	
10 Diamond Hill	40.0	School Trust	-0-	—	C	R-10	1958	
San Juan								
11 Mitchell Hill	320.0	School Trust	-0-	C	C-10	R/TA-10	1889	Agricultural Lease
12 Cady Mountain	40.0	School Trust	-0-	—	C-10	C-10	1958	Marked Timber Sale (deferred)
13 Griffin Bay	14.8	Recreation Purchase	338	R	R-5	R-5	1972	Boating Access Rec. Development
14A Cattle Pt. Rec. Site	14.0	School Trust	2,795	R	R-3	C	1962	Recreational & Educational Lease
14B Cattle Pt./Mt. Finlayson	83.0	School Trust	1,300	N	C-3	R/TA-10	1959	Timber Sale (1977); Water Line ROW
Lopez								
15 Bella Tierra	20.0	Recreation Purchase	700	C	C	C	1975	Recreation Purchase (undeveloped)
16 Odlin South	106.0	School Trust	-0-	—	C-15	R/TA-15	1959/1961	Marked Timber Sale
17 Lopez Hill	400.0	School Trust	-0-	—	C-10	R/TA-15	1889	Marked Timber Sale (Board approved)
18 Chadwick Hill	120.0	School Trust	-0-	—	C-10	R/TA-15	1889	
19 Iceberg Point	20.0	School Trust	2,715	N	N	C	1962	
20 Shark Reef	38.0	School Trust	1,330	N	C-5	C-5	1959	Recreation Lease (entire property)
21 Shark Reef Road	39.0	School Trust	-0-	—	C-5	R/TA-15	1958	
Others								
22 Shaw Island	30.1	School Trust	-0-	—	R-5	R-5	1959	
23 Blakely East	225.0	School Trust	6,210	N	R	C-5	1965	
24 Thatcher	7.0	2nd Class Tideland	1,535	C	R	C-5	1975	
25 Center	5.0	Recreation Purchase	526	R	R-2	R-2	1975	Recreation Purchase—Boating Access

1982, in which the legislature allowed timber companies to default on contracts for state timber worth 167 million dollars. The Supreme Court declared the law unconstitutional and ruled that the legislature had acted with "divided loyalties" when its first obligation was to the Trusts. General public benefits not compatible with the financial obligations in the management of Trust Land may be permitted only if there is compensation from such uses satisfying the fiduciary obligations.

For the purpose of providing increased continuity in the management of public lands and facilitating long range planning by interested agencies, DNR may withdraw limited acreages from income obligation under the Multiple Use Act (79.68 RCW.). Such acreages may be maintained for the benefit of the public as areas in which the natural ecological systems, whether unique or typical to the State of Washington, may be observed, studied, enjoyed or otherwise utilized. However, these uses do not modify DNR's obligations to manage the land under its jurisdiction in the best interests of the beneficiaries of Trust Lands. DNR has an underlying legal obligation to diligently pursue long-term economic benefits for the Trusts.

Recent unprecedented defaults on state timber contracts totaling over \$250 million combined with low projected prices in the future for timber have placed the Common School Construction Fund in a precarious situation. Between 1970 and 1983, the fund provided \$783 million or 62 percent of the required funds for school construction projects. The Superintendent of Public Instruction estimates \$1.3 billion will be needed in the next 10 years at a time when incomes from timber revenues are expected to drop to around \$30 million per year. In other words, the Construction Account will receive only 25 percent of the projected needs. As a result, many school districts cannot build or repair their buildings in a timely fashion. During the last decade, San Juan County School Districts received \$750,000 for additions and remodeling at the San Juan Elementary School and the Eastsound Junior High School.

One result of this shortfall has been a reevaluation of School Land management in an attempt to diversify and stabilize income flow to the Trusts. The integrity of the School Construction Account requires improvements or alternatives for the long-term management of these lands. In short, DNR has to generate more income for the Trusts, or as one Committee member succinctly stated, "Where's the lease?"

The San Juan Islands Trust Land Advisory Committee

As part of the reevaluation of the "Trust portfolio", Commissioner of Public Lands Brian Boyle has directed the DNR to develop a long range management plan for the Trust Land in San Juan County. This effort was initiated in 1983 after the San Juan County Commissioners expressed growing concern with DNR proposals. The County supported evaluation of DNR lands under the Multiple Use planning provisions of RCW 79.68.

Previously, DNR and San Juan County seemed to be at an impasse regarding Trust Land management. DNR had proposed or carried out timber sales or recreational developments without the benefit of a long range plan. Statements by DNR officials about the possible sale, exchange or lease of Trust Land had alarmed County officials. Several proposals for logging of sensitive sites and sale to private development interests were judged to be inappropriate by the County.

The DNR opposed the "Conservancy" designation placed by the County Comprehensive Plan on Trust Lands. This designation requires that DNR apply for a Conditional Use permit to harvest timber from Trust Lands. Under the Forest Practices Act, DNR is the designated regulatory agency for overseeing the removal and replanting of trees on private and state land. Two sales approved by the Board of Natural Resources were deferred because application to the County for Conditional Use permits would have raised serious questions for DNR. Similarly, failure to apply for these permits would have raised serious questions for County officials. In addition, under other state laws, DNR abides by local land use regulation when state lands are treated "substantially the same" as adjacent private lands. The Conservancy designation on most Trust Lands appeared to DNR officials to be a form of "spot zoning" with negative financial consequences for the Common School Trusts. The County felt justified in protecting sensitive sites from destructive logging and inappropriate development.

Relations between the County and DNR were characterized by suspicion and distrust. Both parties were frustrated but wished to avoid a court battle that would be costly and uncertain. As a result of meetings between the County Commissioners and the Commissioner of Public Lands, both parties agreed, in a Memorandum of Understanding signed on January 24, 1984 to resolve their differences within a

framework of cooperation and consultation for the planning and long-term use of the DNR-managed Trust Lands. A critical part of the planning process is the 12-member San Juan Islands Trust Land Advisory Committee appointed by Commissioner Boyle, in consultation with the County Commissioners.

The purpose of the Committee has been to provide a forum for discussion of issues and areas of concern regarding the wise and prudent multiple uses of DNR managed-lands. The goal of the Committee process has been to obtain advice and information from state and local agencies and groups, the general public and from its own members on how to integrate DNR trust obligations for environmentally sound land management with educational and recreational opportunities and with the concerns of island and regional residents.

What The Committee Has Done

The Committee held its first public meeting late in January, 1984 at which they adopted a Charter, Operating Guidelines and a schedule for their work. During subsequent meetings, background information was provided by DNR and County staff about various aspects of land use and management. Committee members visited nearly all the Trust Land parcels in a series of Saturday field trips. During these site inspections, Committee members shared their knowledge about geology, ornithology, forestry and environmental engineering.

In late March and early April, the Committee held a series of public fact-finding workshops to gather information and ideas from island residents. Based on this information, the site visits and previous discussions, the Committee held two all-day work sessions in April to explore various alternatives and opportunities offered by each of these properties.

During the summer, the DNR project manager developed a "Working Draft" of the Committee's deliberations. Copies of this report were circulated to Committee members only. Each Committee member was individually consulted regarding suggested changes or improvements to this report. These changes were incorporated into a Draft Report that was discussed and approved on September 17 at a public meeting in Eastsound.

Committee Draft Recommendations were published in full and available to all citizens and groups for comment for approximately six weeks. In addition, 6,700 summaries of the

Draft Recommendations were mailed to all residents of the County and to all property owners adjacent to Trust Land. The public was invited to participate through the use of a pre-paid mailer or by attending one or more of the scheduled public meetings.

During the last week in November 1984, the Committee conducted a series of five community hearings at various locations to gather citizen comments on the draft policy and site recommendations. These hearings were attended by approximately 100 citizens. In addition, almost 70 "Mailback" response forms were received as well as over 20 letters. A summary of the meeting comments, as well as the written responses and the letters received accompany this report in the Appendix.

The Committee's deliberations have been guided by five primary factors contained in the Committee Charter: 1) The Trust nature of the state lands; 2) Sound principles of resource management; 3) Multiple use provisions compatible with basic Trust obligations; 4) Protection of public resources (e.g., water, wildlife); and 5) San Juan County plans and policies.

Committee Recommendations

These recommendations are divided into two sections: Policies and Site Analyses. The Policies Section presents a framework for the Multiple Use and Administration of the Trust Land in the County. These policies define the important social and environmental values of Trust Land and propose ways for DNR to operate as a "good neighbor" in San Juan County while prudently generating incomes for the School Trust.

In the Site Analyses Section, each property is examined for its environmental and community resources. The Committee has indicated the parcels suitable for forest management, natural preserves or land that should not be managed by the state but should be kept in public ownership. The Committee concluded that the Trust responsibilities of the DNR and the potential forest productivity of certain lands provide an ample justification for a continuing presence by DNR in land management activities in San Juan County. From a prudent trust management standpoint, the holding of lower valued nonforest management lands is also a fiscally sound position, since this land has historically increased in value. However, in the future, DNR must have a prudent reason for not doing something on its lands.

The Committee also recognized that if the community waits 20 years to acquire some of this property, It will increase astronomically in value. The time is past when the public can expect to have these Trust Lands for nothing. At the present time, with a favorable atmosphere of community interest, DNR can be responsive to public initiatives. The opportunity exists for a "pre-emptive strike" whereby the local public should assert itself and propose feasibility leases, community land purchases or exchanges that meet DNR financial obligations and local concerns. The Committee believes that the uses of Trust Land are limited only by imagination and energy if the underlying obligations of the lands are addressed.

These recommendations are long range in nature and should be considered as valid policy objectives. As such, they should prevail over short range or conflicting opportunities that may otherwise seem expedient. The policy and site recommendations may be extended and updated periodically as provided in the implementation section, but should also be accompanied by an evaluation process comparable to that of this Committee.



Multiple Uses of Trust Land





Multiple Uses of Trust Lands

FOREST MANAGEMENT

San Juan Islands Forestry

Of the 26 pieces of DNR land in San Juan County, the Committee recommends that five units be managed specifically for timber production and multiple use. On Lopez Island, the four units are Odlin South, Shark Reef Road, Chadwick Hill and Lopez Hill. On San Juan Island, the Mitchell Hill block should be managed for forestry and multiple use. On Orcas Island, portions of the Point Lawrence property may be managed for forestry in the future. A key provision of the management plan for each of these five forest units is a long-term schedule for harvesting and regeneration of the forest. As discussed below, the specific management activities would depend on the current state of knowledge regarding the best management practices for San Juan Islands conditions. There is little current knowledge regarding the most prudent and successful strategies for island soils, climate and forest cover. While this section of the report defines the general forestry policies, site specific recommendations will be found in the site analysis section.

The Committee reviewed the DNR management plans for the 600-acre "Hoypus Hill" block on Whidbey Island and found many commendable ideas that had been incorporated into long range plans for this unit. They believe that many of the same ideas could be incorporated into the planning and management of DNR forest lands in San Juan County.

There are few examples of long-term committed forest management in the County. This is partially the result of two very different assumptions. The first is that growing trees in the relatively dry and rocky soils of the County is not profitable. The second is that land prices are so high that timber management is not a viable commercial investment. While some large landowners have cut trees from their properties for years, there are few examples of a conscious investment of time and capital to improve the quality of the forest over time. Unfortunately, the possibility of rather substantial cash flow in the near-term has often been contradicted by the long-term needs of the forest.

Regarding the first assumption, recent studies of forest

soils in San Juan County and other counties in the Western Puget Sound Trough have shown, contrary to previous assumptions, that the soils of this region are highly productive, if properly managed to capture the rapid growth characteristics of these soils during the first 50 years of stand development. However, the low nitrogen and trace mineral content of these soils also make it necessary to modify site preparation, regeneration and harvesting methods to conserve these essential nutrients. Some management constraints can be indicated given the present state of knowledge. Primarily these involve limitations on use of ground-operated equipment during wet conditions to minimize soil compaction, use of designated skidtrails to minimize loss of productive land and high standards of utilization to minimize the need for slash disposal and slash burning. For instance, firewood gatherers were so efficient on the relatively flat ground on Hoypus Hill, that DNR managers planted new seedlings without having to burn logging slash to reduce the residual materials on the site.

The units indicated by the the Committee for forestry are characterized by three major soil types: Roche, Bow and Pickett. The Roche and Bow soils are capable of growing a Douglas fir tree over 100 feet in height in 50 years. The Pickett soils are capable of growing an 85-foot tree during the same period. These soil types fall well within the range of productivity judged by DNR managers to be a prudent and financially sound investment for sustained yield forestry. The unique qualities of these soils and the current lack of knowledge about the best management practices for this region suggests that long-term research trials and demonstrations are needed.

The Committee believes that the Trust responsibilities of DNR, potential forest productivity, the relatively low real estate values of the properties indicated for forest management and the fact that DNR has no substantial holding costs for Trust Lands, such as property taxes or real estate contract obligations, provide ample justification for a continuing presence by the DNR in land management activities in San Juan County. From a prudent Trust management standpoint, the holding of lower valued nonforest management lands for future increases in value is also a fiscally sound position.

The Committee also believes that an important component of the local San Juan Island economy is the forest industry. Forestry has long been a part of the economic structure of San Juan County. For instance, the kilns at Roche Harbor once

consumed over 30,000 cords of wood per year to slake limestone. Areas on San Juan Island have been cutover and reforested three and even four times since the Civil War. Active management of DNR lands will help keep the forest industry as part of the economic fabric in the County.

It should be noted that of the five parcels indicated by the Committee for forestry, four have been extensively logged in the past. The three larger parcels on Lopez Island were clearcut and/or burned between 1880 and 1915. The Shark Reef Road property shows evidence of an intense forest fire. Aerial photos indicate that Mitchell Hill was clearcut in the early 1940s.

The Committee reviewed past DNR forestry proposals for San Juan County and developed an appreciation for the complexities and opportunities of thoughtful resource management. Generally, the Committee recommends that DNR adopt a philosophy of small unit management with a high degree of attention paid to the site-specific characteristics of individual management blocks. Two timber harvesting systems received considerable review: Shelterwood and Clearcut. The use of either system is constrained by topography, soils, stand type and vigor, regeneration potential and economics.

Under the Shelterwood silvicultural system, harvesting is scheduled in three stages, usually spanning 15 to 20 years. In the first harvest, the less vigorous trees are selectively cut. This tends to increase the seed production and vigor of the remaining trees. The second cutting, known as the seed tree harvest, leaves only the best seed-source trees, while simultaneously creating a good seedbed for young seedlings. The third cutting is the final harvest, during which the last trees from the original stand are cut and the new young trees are healthy and well advanced.

An alternative to Shelterwood harvesting is Clearcutting. Clearcut harvesting units on a portion of a site may be necessary to rehabilitate underproductive and poorly stocked stands, to regenerate a new, healthy forest cover or to treat endemic disease such as root rot or dwarf mistletoe. If a clearcut harvesting unit is necessary for healthy forest reproduction, the Committee recommends that units should be approximately 15-30 acres. Logging in adjacent areas should not take place for 5 to 7 years or until the canopy closure of the new forest stand.

One of the primary criteria for the size and shape of clearcut units would be the aesthetic impact of a large

opening in the surrounding landscape. For the most part, the areas considered for this type of management are on biologically productive and relatively flat ground where little would be visible unless the sale unit came right to the tree line. Sales should be designed to minimize visual disruption of the island landscape and blend harmoniously with other adjacent land use practices. Wherever possible, DNR managers should work in consultation and cooperation with adjacent forest land owners.

For each of the six forest management sites, a harvesting schedule should be developed that indicates on a year-by-year basis the proposed cutting units. However, while this schedule will reflect state of the art forest planning for 1985, the results of the continuing experimentation and monitoring of results in the San Juan County forest lands would require a certain amount of flexibility so that these plans can be revised to reflect increased knowledge.

The Local Economy and DNR Forestry Units

In keeping with the "small unit" philosophy suggested above and the concept of keeping forestry a viable industry in San Juan County, the Committee recommends a number of ways to keep some of the financial and other benefits generated by DNR timber sales in the County. One suggestion was for DNR to use the option of selling timber in what are known as "Area Sales". These sales are appraised at less than \$20,000 in value, or approximately 5 to 8 acres in size, and can be sold without the lengthy review process required of larger sales. Such sales could be bid on by local loggers and provide needed work opportunities. The Committee concluded that the multiple use plans, developed in conjunction with the County, should allow time for ample review and comment by the community for larger sales.

Another suggestion was to develop sales proposals that would involve moving a portable mill onto the sale site. Lumber milled from DNR land could then be sold in the County. In addition, the wood slabs could be sold for firewood and the sawdust utilized for agricultural purposes. Portable mills offer the possibility of a much higher level of local utilization of forest products and also provide a means to keep forest-generated dollars circulating in the community. A further advantage would be reduced costs to the logger from not using the ferry, thus increasing the bidding price on the timber.

A third benefit to the local economy would be the availability of firewood after DNR timber sales. While this is a common practice statewide, this program should be especially stressed in San Juan County. Reduction in the quantity of logging slash by firewood cutters reduces or eliminates the need for slash burning. A further benefit is that the costs of slash burning are also eliminated, thus making land management more profitable over the rotation period.

Experimentation

The harvesting units and schedules would be based on soil type, slope, forest cover, regeneration potential for seedlings, location of stream corridors and wetlands, unique animal or plant habitats and concerns of neighboring property owners. The primary species for forest production purposes will be native Douglas fir. However, the variable nature of San Juan County sites requires that reforestation prescriptions be based on a microsite analysis taking into account moisture stress, exposure to sun and wind, soil depth, existing forest type and other factors. On some sites other species such as white fir, lodgepole pine, alder or cedar may be more appropriate to plant or favor in management.

In order to minimize management costs (which must be carried over a 60-year rotation period), natural regeneration from surrounding seed sources will be used as much as possible. However, unless there is sufficient healthy seed source present, the danger exists of only furthering a less than optimum selection of trees. Past harvests in the islands have, for the most part, taken the best, well-formed trees and left the defective and least productive parent trees. This has led to a genetic degradation of the current forest. A deliberate, selective tree harvest would encourage and maintain examples of healthy gene pool resources. A second and complementary alternative for reforestation is the introduction of healthy seed stock from other, similar locations to broaden the genetic amplitude of the existing forest.

As noted above, the current state of knowledge about San Juan Islands forestry requires that all management practices be characterized by a high degree of experimentation, monitoring and flexibility. DNR managers believe that with proper stocking levels, close attention to nutrient supplies and cultivation of the best trees suited to the particular site, a highly productive forest will result.

RECREATION

Recreation on Trust Land is one of the most important benefits that both managed and unmanaged DNR lands can provide to the local and visiting public in the San Juan Islands. Particularly on forest management sites, multiple uses, including recreation, should be encouraged to the maximum extent possible, compatible with protection of the resources and of the local residents. The intent of these Recommendations is not to restrict the use of forestry sites solely to forest management but to provide opportunities for public use in conjunction with income production. Managed forests should serve the public through limited access except during those relatively few and brief periods in the life of a timber crop when the public would be endangered by a logging operation, and the logging equipment might be damaged by vandalism. The Committee Recommendations emphasize passive day-use recreation when active logging is not going on.

Recreation site planning, development, maintenance and operations occur on Trust Land as part of multiple use management. When recreational uses of Trust Land require investment of manpower or materials, these costs are funded from a General Fund appropriation from the legislature to the DNR Recreation Program. DNR personnel do not charge recreation operations or maintenance costs to the Trusts.

All recreational development should be modest in scope, carefully planned, environmentally sensitive and compatible with DNR long-term management, the concerns of the local community and San Juan County residents. For instance, inactive skidroads developed for logging could also be used for hiking and horse trails. In the context of site planning, development and management, provisions should be made for monitoring recreational use-levels to assure that neither resource degradation nor degradation of adjoining properties occurs.

Cooperative relationships with user groups which don't infringe on management objectives should be encouraged to minimize development and operations costs as well as develop a sense of local responsibility and care for these lands. If, however, a parcel of Trust Land is desired for an exclusive use, such as grazing, then a lease would be required. These guidelines attempt to provide a framework for compatible uses which balance DNR's legal requirements and the interests of the public.

A number of recreational activities have been proposed in conjunction with DNR Trust Lands. These include hiking, horseback riding, wildlife and plant observation, beach walking, picnicking, camping, hunting and off-road vehicle use (motorcycles, ATVs, etc.). To protect public resources and to minimize conflicts with adjacent property owners and communities, state policy requires that all off-road vehicles (ORVs) be prohibited on Trust Land unless there is an approved ORV plan for the property. These plans must meet with the approval of the local government. In the case of San Juan County, ORV areas are a prohibited use in the County Comprehensive Plan. Therefore, off-road vehicle use is prohibited on Trust Land in San Juan County.

The Committee proposes the following Recommendations to guide site development for any one or combination of the following recreational activities.

Hiking

Hiking trails should be carefully located and constructed. Trails should be made available with a minimum of signing and located with natural travel patterns and safety in mind. Both access and loop trails should be designed to have a minimal impact on the surrounding environment. Where trails cross wet areas, they should be puncheoned (rough cedar boardwalk) or turnpiked (raised trail tread) to avoid trail widening due to muddy surfaces. Trails should be kept as far as possible from neighboring property lines. As mentioned in the Administration Section, respect for the rights of adjacent property owners is critical to compatible public uses of these lands.

Where DNR land borders large public or private holdings, cooperative trail use agreements should be developed, if possible, to provide more opportunities for hiking trails and loops. Maintenance of historic trails should be incorporated into forest sale plans. Development of walking (or horseback) trails by user groups should be accompanied by an understanding about present and future DNR plans. Some trails may have "floating trail easements" which change location with forest management activities. For specific trails built on historic rights of way, there may be a need to lease trail corridors and buffers if they cross future harvest units.

Horseback Riding

On some larger DNR parcels, horseback riding is a current or potential recreational use. If conflicts arise between equestrian and pedestrian traffic on trails, separate bridle trails should be available on Trust Land parcels. These trails should be constructed to standards that minimize resource damage. Consideration should be given to seasonal closure during the winter months. On forestry parcels where horseback riding is a recreational activity, minimal facilities should be provided. Where fragile biological resources could be damaged by horse traffic, this use should be prohibited. This may be particularly true on the smaller sites noted for preservation purposes.

Wildlife and Plant Observation

Observation of the natural systems of the San Juan Islands is a popular activity for many residents and visitors. Some of the Trust Lands offer an extraordinary opportunity to witness various birds, including eagles, mammals and undisturbed flora. Plant ecologists from the DNR Heritage Program have noted that the greatest value of some of these sites may be their "native" undisturbed condition. Even on those sites which have been manipulated in some way over the past century, there are remarkable opportunities for studying the natural succession of vegetation and the dynamic changes in the animal population due to changing habitats. Because much of this land should remain public and accessible, these opportunities will become increasingly important over time as larger numbers of property owners assert their rights to privacy. If interpretive signs or facilities are needed, they should be kept low-key, unobtrusive and in harmony with the site.

Beachwalking

Some DNR uplands provide opportunities for access to public tidelands. Public testimony received by the Committee indicated a desire for greater access to the saltwater beaches. In conjunction with the management of these upland parcels, the Committee recommends that DNR should make a coordinated effort

with San Juan County to acquire public access to the public shorelines of the County. Where such access is provided, notice should be posted that the shorelines of the County are designated a Biological Preserve (28.77.230 RCW) where it is illegal to collect or disturb marine life.

Picnicking

Passive day use picnic sites have been constructed at Cattle Point and Obstruction Pass. These facilities have parking, picnic tables, fire pits, vault toilets and garbage cans. If other day-use sites are constructed on Trust Lands, the objectives should be to minimize the size and intensity of development, reduce the need for maintenance, minimize the danger of fire, and to prohibit overnight camping.

The intensity of development can be controlled by determining from the outset that the site will be used for day-use only and requiring people to walk a certain distance (e.g., one-half mile) to reach their destination or by using other site planning methods. Obstruction Pass is a good example. Maintenance needs can be reduced by asking people to pack out their own garbage, setting a proper antivandalism tone by immediately repairing any damage and by providing vandal resistant installations. By using the Recommendations suggested in the Administration-Trespass Section, the problems associated with keeping numbers of people on public lands of limited size can be addressed. Danger of fire is minimized by prohibiting open fires at day-use areas. This also avoids forest fire hazard, an acute concern in the islands during the summer, as well as discouraging overnight camping. If any facilities are provided, they should be near the parking area rather than in the relatively undisturbed areas where trails would bring people to viewpoints or shorelines.

Camping

Overnight camping opportunities on public lands are limited in the San Juan Islands. Camp sites on DNR land are, by law, "primitive," with hand-pumped water, fire pits, and outhouses.

Obstruction Pass is currently the only overnight campsite with upland access. Because these sites are free, campers sometimes abuse the privilege and stay for extended periods. Shortening the prescribed length of stay would allow more people to enjoy these sites and also reduce the potential for

trespass and mischief. Under DNR rules, the Local Manager may determine the length of stay of campers "in the best interests of the site and the public."

Increased camping opportunities would meet present and projected demands, particularly on San Juan Island, where the only public campground is the County facility at Smallpox Bay and the DNR marine access site at Griffin Bay. If new overnight facilities are provided on DNR land, appropriate site development must protect the interests of adjacent neighbors. Other impacts such as traffic, water quality and degradation of fragile areas must also be taken into account. If camp sites were available only by walking in, no fires were allowed and no water was provided, use would probably be limited to a fairly small number. Underlying any camping recommendation is the notion that these developed kinds of recreational opportunities are best provided by the State Park system. If such opportunities are provided on DNR lands, a caretaker should be considered to maintain control and assert a supervisory presence.

Generally, the Committee recommends that DNR develop passive day-use sites, rather than overnight camp sites on Trust Lands. However, day-use facilities must be constructed with the understanding that they have the potential to become de facto overnight facilities without proper supervision and administration. An additional, but equally important, consideration is that facilities on DNR lands not duplicate opportunities available on County or State Park lands. Facilities for visitors should be concentrated and formalized rather than dispersed and haphazard.

Hunting

Hunting as a recreation activity on DNR lands created more controversy than any other single issue. Committee members received testimony at Workshops and in letters about members of the public having shots from careless hunters nearly hit them while walking in what they thought were preserves (Shark Reef). Many DNR parcels are near residential development, schools, parks or livestock (e.g., Shark Reef, Odlin S., Lopez Hill, Cattle Point and Obstruction Pass). Testimony also suggested that if DNR lands were closed to hunting, it would reduce questions of liability to the Trust. This testimony bolstered the position of those who assert there should be no hunting on DNR land. They believe that the level of deer population will be controlled through natural selection.

Others stated that some island dwellers still hunted native deer to supplement their diet. For example, Lopez Island residents indicated that nonisland residents were a hunting minority. Department of Game biologists and observers of island wildlife have noted the stressed nature of the deer population, with increasing numbers of deer starving for lack of feed or, alternatively, becoming domesticated by relying on feed from home dwellers. From this perspective, hunting is a way of reducing the population to the carrying capacity of the land. Hunting would be one of the multiple uses of the Trust Land.

There was some indication that these problems may be more acute on DNR lands since San Juan County passed the "Hunting by Written Permission of the Landowner" ordinance. Because DNR land is "public" and no permits have been required, more hunters may have been attracted to these properties. Hunters noted that both Lopez Hill and Chadwick Hill were prime areas on Lopez Island. Mitchell Hill, in conjunction with the adjacent Roche Harbor land, has been historically used for hunting purposes.

The rules and regulations for developed DNR camp and recreation sites state that hunting and firearms are forbidden. While DNR can regulate hunting on developed recreational sites, regulation and enforcement on other properties is the responsibility of the Washington State Department of Game.

Meaningful regulation of hunting can be achieved by adopting the following measures:

- 1) An active program of hunter education involving signing and other information for visitors should be available at the Anacortes Ferry Terminal.
- 2) Hunting should be allowed, under Department of Game regulations, during specified and posted periods on specific large parcels of DNR land: Lopez Hill and Chadwick Hill on Lopez Island; Mitchell Hill on San Juan Island; and Buck Mountain, Buck Mountain West and Mount Pickett on Orcas Island. If the parcels adjacent to Moran Park are added to the park, hunting will be prohibited on those properties. Warning signs should be posted for other recreationists during hunting season.
- 3) NO HUNTING signs should be posted at the boundaries of all other DNR properties.

- 4) The DNR and the San Juan County Sheriff should work cooperatively to develop a mutually acceptable system for providing written permits, as required in the San Juan County Code, for hunting on DNR land.

WILDLIFE

Wildlife was ranked as the issue of greatest concern by those responding to the Committee's original survey in the winter of 1984. The DNR lands, because of their diversity, provide a variety of habitats for many birds and other animals. The varied nature of DNR properties in San Juan County makes it nearly impossible to propose consistent management guidelines for conservation of wildlife. Certain parcels contain eagle or osprey nesting sites. These are noted in the individual site recommendations. Generally, wildlife diversity and population is greatest in the riparian zone next to streams and wetlands. In such zones, the structural complexity of the forest and the gradation from water influenced vegetation to dry uplands offer a variety of habitats.

Three distinct opportunities for wildlife are proposed by the land allocations developed by the Committee. For those lands indicated for Preserve or Moratorium status, the existing conditions will remain essentially unchanged, except for the evolution of the site through natural processes. This would also be true for those parcels which are also proposed for addition to Moran State Park. In addition, the protective provisions of the County Shorelines Management Program, combined with the Conservancy or Natural designation of the shorelines on DNR lands, provide another means of habitat conservation.

A second category would be those lands proposed for trade or sale. Under the stipulations of a binding site plan, any future use of the property could be modified or conditioned to protect important wildlife resources or habitats that exist on the site. For example, provisions for a buffer around a wetland or the requirement to leave a certain number of snag trees could be incorporated into the site plan.

The third category would be those lands proposed for forest management. A managed forest provides six distinct habitats: the riparian area; the brush/seedling stage when a forest is 0 to 10 years old; the pole sapling stage from ages 11 to 30; second growth conifer, 30 to 90 years old; mature conifers older than 90 years and hardwoods. Wildlife biologist have found the greatest diversity of wildlife in stands older than 100 years, in riparian corridors, in the early stages of forest succession when there is an abundance of seeds and browse, and in the ecotones (or "edges") where various types and age classes of vegetation meet. Careful design of forest sales can maintain or enhance wildlife resources by providing

increased edges and browsing opportunities, particularly for deer.

The bogs, wetlands and potholes on DNR properties provide many wildlife habitat possibilities (e.g., Lopez Hill has numerous small wetlands and bogs). Other properties have live streams running through them: Cold Creek originates on the Buck Mountain West parcel and an unnamed stream flows into Mitchell Bay from the Mitchell Hill parcel on San Juan Island.

Another particular habitat provided by some DNR lands is the multilayered structure of the undisturbed forest. As noted above, mature conifer stands older than 100 years provide a varied habitat for many animals, particularly cavity nesting birds and mammals. The numerous snags resulting from previous fires, mechanical damage, disease or insects, provide critical opportunities for nesting, perching, roosting, feeding and denning areas for birds and mammals. Insect eating cavity nesting birds are part of natural biotic insect control. They inhibit rather than eliminate harmful insect epidemics. These same snags and dead-topped trees also provide perch and roost trees for eagles, providing a view of a large area. Snag retention is generally a good policy for maintaining and enhancing a variety of wildlife.

As a threatened species, eagles are of particular importance both as a national and local wildlife resource. Because protection of eagles on private lands is fraught with regulatory difficulties and questions of property rights and values, the Committee recognizes that the conservation of eagle nesting and roosting sites on public lands may be the only way in which stability can be achieved for the resident population. Fortunately, DNR has adopted the U.S. Fish and Wildlife Service Guidelines for eagle management as operational policy on Trust Lands. These guidelines recommend an undisturbed zone of a 330-foot radius around each nesting site and an additional 330-foot zone as a seasonally managed buffer when eagles are most vulnerable to disturbance (between January 1 and April 1).

The Committee proposes the following Recommendations for wildlife conservation. They are general in nature because of the disparate nature of the lands involved. Site specific multiple use plans, including management of wildlife resources, will be more detailed.

- I) All areas designated as preserves or moratorium sites should be fully inventoried by qualified wildlife biologists to determine the extent of the resources present. Areas proposed for preserve status should

have a thorough review by San Juan County as well as public hearings on the island where the preserve is proposed.

- 2) Any parcels considered for sale or trade should be reviewed with habitat biologists and specific mitigating measures taken to minimize or eliminate negative impacts on wildlife.
- 3) Multiple use plans for forestry units should recognize wildlife management as an integral part of the sustained yield policy for resource production. Timber sales should be designed to maintain or enhance habitat quality.
- 4) Wildlife management zones should be designated for the riparian areas adjacent to wetlands, stream corridors and for other critical habitat areas such as cliffs, shorelines and grasslands.
- 5) Integrity of riparian vegetation should be maintained to provide food source for wildlife.
- 6) Snags and trees with dead tops should be left as nesting sites and food sources for cavity nesting birds and raptors. Snags of appropriate size and in desirable locations for wildlife should be marked with a permanent tag and left standing. In certain areas, clusters of snags should be retained. Riparian areas are particularly important as snag retention areas.
- 7) Where necessary, defective green standing trees should be designated as snag recruit trees and girdled at an appropriate time during the rotation to provide a continual supply of snag trees.
- 8) Some downed large organic debris (LOD), such as defective butt logs should be left on the ground to replenish habitat for burrowing and ground dwelling mammals.
- 9) In forest management areas, harvest units should be designed to maximize "edge effect" by using natural contours and varying the size and distribution of timber sales.
- 10) Where desirable, thinnings and selection harvest should be used to meet silvicultural and wildlife management goals.

- 11) Individual management plans for eagle nesting sites should be developed in consultation with the Department of Game. These plans should consider topography, past land use, availability of habitat, vulnerability to disturbance and historical information about the resident eagles. When timber harvest is considered in the secondary zone, flight paths, perch trees, recruitment snags, visibility of feeding areas and vegetative screens should be incorporated into the management plan.
- 12) Closing access by land and water to specific areas during the January 1 to April 1 period should be considered to reduce human disturbance of breeding eagle populations.
- 13) All recreational activities should be designed to have a minimal impact on wildlife and habitats.

EDUCATION

The Trust Lands in San Juan County provide a number of educational opportunities for both school-age children and the general public. Some DNR lands have not been disturbed because of lack of access or lack of past management, while other areas have been previously logged, subjected to wildfire or affected by other disturbances. These lands can serve as a very useful educational resource for the general public, school children as well as university and graduate school students.

Those parcels designated for DNR or local preservation can be used as important "benchmark" areas where the native, undisturbed San Juan biota can be studied and experienced in a controlled, interpretive setting. For instance, the Friday Harbor Marine Labs currently conducts research at the tidelands associated with the Cattle Point and Iceberg Point Trust Lands.

The forestry units will give DNR an opportunity to develop and demonstrate forest management practices appropriate to the conditions of the San Juan Islands. These activities can be incorporated into the school curriculum as well as serving as a demonstration to private landowners of new techniques and technologies for forest land conservation.

The Committee makes the following recommendations for the educational use of Trust Land in San Juan County:

- 1) Research, demonstration and educational uses of the San Juan Islands Trust Lands should not lead to irreversible resource damage.
- 2) Two major types of educational opportunities should be emphasized:
 - a) The interpretation and understanding of the undisturbed San Juan Island ecology as exemplified by sites such as Point Doughty, portions of Point Lawrence, Cormorant Bay, Iceberg Point, Shark Reef and portions of Cattle Point. These sites provide a benchmark of the native ecology while allowing the public a controlled opportunity to experience and learn about the plants, animals and geology of the San Juans. Recreational activities (other than walking on designated interpretive trails) should be discouraged on these sites.
 - b) The interpretation and understanding of active forest management in San Juan County. The development of new techniques of forestry will be an inherent part of DNR activities in the County. The forest management units at Mitchell Hill, Chadwick Hill, Lopez Hill and Odlin South, will provide many opportunities for the public to learn about sustained yield forestry specially adapted to growing conditions of the San Juan Islands.
- 3) All management activities should be designed to incorporate education and research as primary components in the use scheme for the San Juan Islands Trust Lands.
- 4) DNR foresters, ecologists and natural interpretation specialists should work with the several San Juan County School Districts, the Office of the Superintendent of Public Instruction and with local citizens familiar with the biology of the San Juan Islands, to develop curriculum materials relevant to the Trust Lands in San Juan County. These Recommendations propose at least one forest management unit for each of the three major islands.
- 5) Because of its proximity to the ferry landing, the

Odlin South parcel should be considered a primary location for interpretive and demonstration forest activities. The adjacent unmanaged land in Odlin County Park can serve as a useful contrast to the effects of management on a similar type of forest.

- 6) Low-key informational and interpretive materials should be incorporated into the management plan for each forest unit. Designated interpretive trails should be developed as a focal point for day-use activities.
- 7) Shorelines, wetlands, grass lands and other potentially sensitive areas should have interpretive trails designed to maintain and protect these resources.
- 8) Historical and archaeological artifacts and information should be included in any educational materials developed for these Trust Lands. Examples would include the Military Road on Mitchell Hill, the previous Military Reserve status of Odlin South, and the shell at Point Doughty.
- 9) A process of continuing community involvement and an active public information campaign should be a continuing part of the management of these lands.
- 10) Endowments, special funding and contributions from local and regional civic groups, conservationists and other interested parties should be solicited to provide opportunities for special purpose management beyond what is allowed by law and current policy on Trust Lands.

