

Visual Resources

1.1 Visual Resource Inventory

Landscape Units

Landscape Units are used as a framework for the assessment and management of visual resources for the San Juan County Open Space and Conservation Plan. A Landscape Unit is defined as an area of distinct character which forms a spatially enclosed unit or "outdoor room."

Land form, topography and viewshed (the visible area or seen area from important viewpoints) information were used to delineate preliminary boundaries of units. Additional information relating to vegetation, land cover and water bodies, as well as an on-site visual resource survey, were used to refine unit boundaries. The spatial enclosure and relationships between interior elements determine the visual character of the unit. The edges dividing one unit from another are often defined by slope types, ridgelines and other visual boundaries. Each unit was given a name based on a geographic or cultural place name. The names of the units and locations of unit boundaries were reviewed by the OSCC. Suggestions were incorporated into final unit designations.

Documentation of each unit took place during the survey. Photographs and slides were taken of each unit and a visual resource inventory form was filled out (see: Open Space Atlas). The form was used to standardize the description of each unit. It inventories important characteristics, flags unique or scarce resources, and describes intrusions or modifications. In addition, the form uses indicator criteria to assess visual quality. These criteria are termed Vividness (the memorability of the unit), Intactness (the absence of encroachment) and Unity (the relationship between landscape elements, their compatibility). Completed survey forms are found in the Open Space Atlas.

Landscape Types

Landscape Types are used to characterize the landscape for analysis of sensitivity. A Landscape Type is defined as an area of more or less uniform slope and land cover. Landscapes that are of a type will respond in a similar fashion to the effects of similar development.

As opposed to a Landscape Unit, which is geographically distinct, a Landscape Type can occur in more than one location and is described by characteristics (sloped and forested or flat and open) rather than location, and encompasses an area that is visually homogeneous.

Eleven Landscape Types have been identified for San Juan County and are categorized as either Marine or Interior. Marine types are bounded on one or more sides by salt water. They include High Bluff-Forested, High Bluff-Open, Low Bank-Forested, Low Bank-Open and Bay-of-Islands. Interior types are located within the land mass of an island. They include Flat-Forested, Flat-Open, Rolling-Forested, Rolling-Open, Sloped-Forested and Sloped-Open.

The following descriptions identify the characteristics of the eleven Landscape Types, including their visual sensitivity to change.

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MARINE landscape types are those landscapes that are bounded on one or more sides by salt water. They include marine Low Bank-Open, marine Low Bank-Forested, marine High Bluff-Forested, marine High Bluff-Open, and Bay-of-Islands.

**Landscape Type:
marine Low Bank-Open
(mLB-O)**

- Description:**
- low bank beach and shoreline
 - open but may include woodlots, hedgerows
 - often bounded by high banks
- Significance:**
- views to and from water
 - especially significant if pastoral/agricultural areas included
 - especially significant if significant natural resources present
- Sensitivity:**
- high visual accessibility
 - development not easily concealed
 - significant natural resources sensitive to disruption
 - high contrast edge (shoreline) sensitive to disruption

**Landscape Type:
marine Low Bank-Forested
(mLB-F)**

- Description:**
- low bank beach and shoreline
 - wooded but may include clearings
- Significance:**
- views to and from water
 - especially significant if significant natural resources present
- Sensitivity:**
- high visual accessibility
 - high contrast edges (shoreline, treeline, tree/sky silhouette) sensitive to disruption
 - screening of development possible
 - significant natural resources sensitive to disruption

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Landscape Type:
marine High Bluff-Forested
(mHB-F)

Description:

- high bank shoreline
- may include steep mountainsides at shoreline
- wooded but may include clearings
- may include rock outcrops

Significance:

- views to and from water
- especially significant if significant natural resources present
- may be natural landmark/prominent geographic feature

Sensitivity:

- high visual accessibility
- high contrast edges (shoreline, treeline, tree/sky/ridge silhouette) sensitive to disruption
- screening of development possible
- contrasting structures, clearing and erosion very visible
- significant natural resources sensitive to disruption

Landscape Type:
marine High Bluff-Open
(mHB-O)

Description:

- high bank shoreline
- may include steep mountainsides at shoreline
- open or cleared but may include some trees
- may include rock outcrops

Significance:

- views to and from water
- especially significant if significant natural resources present
- especially significant if pastoral/agricultural areas included
- may be natural landmark/prominent geographic feature

Sensitivity:

- high visual accessibility
- development not easily concealed
- high contrast edges (shoreline, ridge silhouette) sensitive to disruption
- contrasting structures, clearing and erosion very visible
- significant natural resources sensitive to disruption

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marine Bay-of-Islands
(mBOI)**

Description:

- small islands in enclosed or open waters adjoining larger islands
- vegetation, topography and degree of development varies

Significance:

- views to and from water
- especially significant if significant natural resources present
- unique landscape type
- prominent geographic features

Sensitivity:

- high visual accessibility
- high contrast edges (shoreline, treeline, tree/sky/ridge silhouette) sensitive to disruption
- contrasting structures, clearing and erosion very visible
- screening development may be difficult
- small scale increases effects of change
- significant natural resources sensitive to disruption

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INTERIOR Landscape Types are totally within the land mass of an island. They include interior Flat-Open, interior Flat-Forested, interior Sloped-Forested, interior Sloped-Open, interior Rolling-Forested, and interior Rolling-Open.

Landscape Type:
interior Flat-Open
(iF-O)

Description:

- little topographic relief
- meadow, pasture, or barren areas of bedrock at ground surface
- changing landscape - seasonal agricultural activities
- may include wetlands
- open but may include woodlots, hedgerows
- often bounded by sloped or rolling Landscape Types

Significance:

- pastoral Landscape Type, especially significant if in agricultural use
- especially significant if significant natural resources present

Sensitivity:

- high visual accessibility
- development not easily concealed
- scale and silhouette of development can intrude
- high contrast edges (treeline, ridge silhouette) sensitive to disruption
- significant natural resources sensitive to disruption

Landscape Type:
interior Flat-Forested
(iF-F)

Description:

- little topographic relief
- wooded but may include clearings

Significance:

- especially significant if significant natural resources present
- can be significant if forms edge against open Landscape Type

Sensitivity:

- low visual accessibility
- edge may be sensitive to disruption
- screening of development possible
- significant natural resources sensitive to disruption
- clearing can be visible from high ground

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**Landscape Type:
interior Sloped-Forested
(iS-F)**

Description:

- sloping hillside/mountainside
- wooded but may include clearings

Significance:

- may be natural landmark/prominent geographic feature
- can be significant if forms edge against open Landscape Type
- especially significant if significant natural resources present

Sensitivity:

- may have high visual accessibility
- screening of development possible
- contrasting structures, clearing and erosion highly visible
- edge can be sensitive if against open Landscape Type
- significant natural resources sensitive to disruption

**Landscape Type:
interior Sloped-Open
(iS-O)**

Description:

- sloping hillside/mountainside but may include woodlots, hedgerows
- meadow, pasture or barren areas of bedrock at ground surface
- changing landscape - may include seasonal agricultural activities

Significance:

- may include pastoral landscape or natural landmark or prominent geographic feature
- especially significant if significant natural resources present

Sensitivity:

- may have high visual accessibility
- scale and silhouette of development can intrude
- development not easily concealed
- high contrast edges (ridge silhouette) sensitive to disruption
- significant resources sensitive to disruption

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Landscape Type:
interior Rolling-Forested
(iR-F)

Description:

- rolling complex slopes
- wooded but may include clearings
- may include wetlands or streams

Significance:

- can be significant if forms edge against open Landscape Type
- especially significant if significant natural resources present
- can include natural landmark/prominent geographic feature

Sensitivity:

- visual accessibility varies
- screening of development possible
- edges can be sensitive if against open Landscape Type
- significant natural resources sensitive to disruption

Landscape Type:
interior Rolling-Open
(iR-O)

Description:

- rolling complex slopes
- open but may include woodlots, hedgerows
- meadow, pasture, barren areas
- may include wetlands or streams

Significance:

- pastoral landscape, especially significant if in agricultural use
- especially significant if significant natural resources present

Sensitivity:

- visual accessibility varies
- some potential to conceal development
- scale and silhouette of development can intrude
- high contrast edges (treeline, sky/ridge silhouette)
- contrasting structures, clearing and erosion very visible
- significant natural resources sensitive to disruption

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1.2 Literature Review

A cursory review of popular literature was conducted to identify 1) the physical and experiential aspects of island character preferred by visitors and residents alike; 2) any clues to landscape and quality of life features considered essential to island character; 3) preferred landscape features, if any, and lastly, 4) to supplement conclusions drawn from the resource inventories and public surveys relative to landscape character and conservation goals.

Several kinds of literature were reviewed including travel essays, regional travel guides, local and regional newspapers, nationally distributed and regional magazines, real estate publications, tourist materials (guidebooks, brochures, newsletters, etc.), regional and local histories, regional natural histories, postcards, travel guidebooks, and local promotional literature.

In general, two conclusions were drawn from the survey. First, key themes used to describe island character pervade the literature. Second, specific landscape elements consistently reflect general and individual island character and appear to serve as the features essential to their attractiveness.

Themes

Three themes can be found in literature which discusses the San Juans. The first is that the San Juan islands are unique among archipelagos and landscapes. The composition of the islands as a submerged ancient mountain range surrounded by spectacular views of volcanoes and marine scenery is said to exceed the Greek Isles in splendor. The combination of views, natural beauty, abundance of wildlife, quality of life, scale of place and history, and extensive recreation opportunities make the area one of the most attractive in North America, perhaps in the world. The area's relative inaccessibility from the mainland, the planning required to reach the islands, and the actual journey itself also contribute to the area's uniqueness.

The islands are often described as a manifestation of everything good about life in the Pacific Northwest; hence, the second theme, that of *genus loci* or a sense of place. Many writers describe the San Juans as an area which represents a 'gentler world', and "different scale of time and place", and provides a certain seclusion from the tempo and demands of urban or modern life. The islands are said to possess the perfect balance between access and seclusion. The literature abounds with adjectives which give the reader emotive rather than factual information about the islands. Words like peaceful, tranquil, harmonious, charming, serene, fragile, friendly, intimate, etc., are used over and over to describe the character and experience of the islands. Life is simple, independent, yet very special in the San Juans.

Finally, the literature consistently characterizes each island by landscape composition, economy, life-style and available recreation activities. A clearly identifiable, albeit brief, profile of Orcas, San Juan, Lopez and Shaw islands is found throughout most of the literature surveyed. While some of the descriptions can be attributed to the purposes, functions and sources of the articles and guidebooks, a certain amount seems to affirm the existence of identifiable features and the perception of them as characteristic of one's experience of each island. The following discussion summarizes the main descriptors for Shaw, Lopez, Orcas and San Juan:

Shaw island is the smallest, most isolated and private of the ferry served islands. It possesses the strongest sense of community and is considered the most "eccentric". The

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log schoolhouse, library and historical society are considered important sites on the island.

Lopez is bucolic and pastoral, made up of a patchwork of small farms and fields and shorelines dotted with small headlands and secluded beaches. The island is still a working landscape and is less visited by tourists than San Juan and Orcas. Its residents are often described for their friendliness, relaxed manner and tendency to wave at passersby. Lopez is simple and serene. Parks (Odlin, Spencer Spit), bays (Fishermen's, Hunter, Mud, Shark), historic sites (Richardson store, library, Center Church and cemetery), Shark Reef, MacKay Harbor and Agate Beach are usually mentioned as important island sites.

Orcas island is said to be the most scenic of the major four islands because of its dramatic topography, deep forests, panoramic views and charming villages. It possesses "more of everything - mountains, forests, lakes, shorelands" than any other island. It is often described as "introspective" and "parochial." Beaches (Crescent), bays and harbors (Doe, Deer) and visible pastoral settings such as Crow Valley are considered well-known critical features of the island. Moran State Park, Mount Constitution and Rosario Resort are important public destinations.

San Juan island is the commercial and business hub in the archipelago. It is considered fast-paced, and busy, mixing the charm of another time with the hustle of contemporary change. San Juan is the most eclectic of the islands. The interior possesses extensive farm lands, forests and views across long narrow valleys. The shorelands and harbors reflect rapid growth and the bustle that accompanies large numbers of visitors and their related activities. The island dramatizes the many physical and social changes taking place throughout the entire archipelago. Beaches (Jackson, South), bays (False, Mitchell), secluded harbors (Roche), existing parks (Whale Watch, Lime Kiln), historic sites (Cattlepoint, American and English Camps) are the most cited features.

Critical Landscape Features

The literature provides a strong consensus on landscape features which seem to be essential to characterizations of the islands. These features include: panoramic marine, mountain and forest views, unbroken forested ridgetops, narrow scenic roads, secluded residential and open space settings, small communities in rural settings, private coves, pristine shorelines - whether wooded or open, pastures, and access to beaches. In general, the literature seems to supplement public sentiment about desired types of protected open spaces, although it tends to list specific sites already in public ownership or under some kind of protection program.

Bibliography

- Arnold, Thomas. Adventure Guide to the Pacific Northwest. Hunter Pubs, 1988.
- Birn, June. One Hundred Days in the San Juans, 1946.
- Brener, Michael and Rosemary Neering. San Juan Islands.
- Cardle, Doug. Who the Hell was San Juan?
- Cummins, Al. Gunkholing in the San Juans.
- Friday Harbor and the San Juan Islands. Umbrella Guide.

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- Harris, Richard. *22 Days in the Pacific Northwest*. John Muir Pubs., 1988, pp. 42-58.
- Keither, Gordon. *Ferryboat Islands*.
- Lyons, Dianne. *Washington Handbook*. Moon Pubs., 1990, pp. 141-151.
- MacDonald, Lucille. *Making History. The People Who Shaped the San Juans*.
- MacFarlane, Marilyn. *Best Places To Stay in the Pacific Northwest*. Houghton-Mifflin, 1988.
- Mountaineers. *The San Juan Book for Kids*.
- Mueller, Marge and Ted. *Afoot and Afloat. The San Juan Islands*. Second edition, The Mountaineers, 1988.
- Olmsted, Gerald. *The Best of the Pacific Coast*. Crown Pubs., 1989, pp. 245-259.
- Steelquist, Bob. *Ferryboat Guide to Puget Sound*. American Geographic pubs., 1989, pp. 154-172.
- Terragraphics. *Touring the Islands*. Second edition, Eugene, Or, 1990.
- Van Clive, Friday Harbor. *Then and Now*.

Periodicals

- Brown, Jo. "San Juan Sojourn", *Seattle Home and Garden*, Mar/Apr 1991, pp 51-52.
- Carson, Rob. "North by Northwest", *Savvy*, June 1987, pp. 76-78.
- Fussman, Cal, "Why we care: let us tell you some stories", *Life*, May, 1990.
- Gallagher, Tess. "Island Hopping in the Pacific Northwest", *Vogue*, June 1990, pp. 174-179.
- Green, Lewis. "Yankees Go Home", *Saturday Evening Post*, vol 260, issue 8, November 1988.
- Halliday, Jan, "The Sweetness of the San Juans", *Pacific Northwest Magazine*, July 1990, pp 25-36.
- Harris, Stephen, "The San Juan Islands", *American West*, April, 1989, pp. 78-82.

Miscellaneous Periodicals

- Monthly Real Estate guides, 1989, 1990.
- Pacific Northwest Magazine, 1988-1990.
- San Juan Beckons. A supplement to *The Islands' Sounder*, Fall, Winter, Spring, 1988, 1989, 1990.
- San Juan Journal, 1989-1990.
- Springtide, *Guides to the San Juans*, 1988-1990.
- Sunset Magazine, 1988-1990.

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Community Preferences

1.3 Community Preferences

Community and viewer preferences for the landscape of the San Juans were documented using several methods to establish 1) the features important to conserve, 2) the conditions understood to detract from open space quality, and 3) priorities for conservation action. Information used included photographs, opinion surveys, questionnaires, maps, community workshops, and a review of popular and periodical literature. The results were cross referenced to broaden the survey population and verify the data gathered from the Open Space and Conservation Committee (OSCC) and the consulting team.

Process

In addition to reviewing the community data gathered, the OSCC expressed its own concerns and preferences for open space resources; these were included in the analysis process. Initial responses were used to help develop sampling methods and compose questions to be put to the community. The OSCC views (Figure 1) proved representative of the concerns of the community as a whole (Figure 2 and Figure 3).

An additional source of information used to assess community preferences was the 1989 Community Opinion Survey sponsored by the Friends of the San Juans and the San Juan Economic Development Council. The survey provided some of the initial assumptions used in framing questions posed to the community in preparing this plan. An aggressive follow-through program helped to achieve very high reliability. Several of the 1989 survey conclusions are relevant to this plan. Survey respondents indicated: 1) the rural character of the County is an important factor in the quality of life here, and 2) people are willing to pay for additional open space and natural resource protection. An open-ended question asked respondents to "name one specific place in the islands you would especially like to see preserved." Responses to this question were compiled and mapped for this plan (see Map Folio).

The July public meetings were work sessions attended by 127 people (San Juan 32, Orcas 48, and Lopez 47). Small groups were assembled and asked to brainstorm, then report five criteria most important to them for selecting open space resources to be conserved. (Figure 3)

The Viewer Employed Photography (VEP) process began with the June public meetings at which film, maps, and a form for recording information about each frame

Figure 1. Committee Concerns for Open Space

<p><i>Preserve quality of life</i></p> <ul style="list-style-type: none"> • how to save and maintain? • rural feeling. • views - wide open spaces, pastoral, shoreline • wildlife • agriculture • sense of seasons <p>"This is nice". How can we keep it</p> <p>Balanced approach to maintaining quality of county</p> <p>Emotional • Visual • Physical</p>	<p><i>Growth threatening why we came to county</i></p> <p>Change is tough to stop or channel</p> <p>Old farm land vistas - view from the road</p> <p>Waterfront as is - view from water</p> <p>Habitat - birds especially - wildlife - wetlands: its "Alice"</p> <p>Island feel - farms, wetlands</p> <p>Invisible places are important too</p> <p>Chance to keep natural environment and live with it</p> <p>Experience of a rural way of life</p> <p>Beautiful - mountains, sea, wildlife, woods</p>	<p><i>Future generations</i></p> <p>Keep it an affordable place to live</p> <p>Social and physical beauty</p> <p>Life style - formerly classless - what is it becoming?</p> <p>Nighttime views from water</p> <p>Adverse effects on social fabric</p> <ul style="list-style-type: none"> • low/fixed income <p>Places we would miss if lost</p> <p>Capacity of county to accommodate change</p> <p>Quiet</p> <p>Tourism as a threat</p>
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were provided to those attending. Additional rolls were distributed by the OSCC and the Planning Department. 75 completed rolls and forms were returned to the consultant for analysis (Figures 4, 5 and 6). VEP results confirmed that 1) pastoral landscapes are the primary open space feature significant to viewers, 2) pastoral landscapes are sensitive to degradation from rural residential development and other non-agricultural structures, 3) undeveloped hillsides, ridges and shorelines are significant open space features sensitive to visible development and to clearing, and 4) views across water to shorelines, especially undeveloped shorelines, and distant mountain ranges are highly valued.

Figure 2. Questionnaire Responses

Question: LIST SOME OF THE TYPES OF NATURAL RESOURCES AND OPEN SPACES YOU FEEL ARE IMPORTANT TO YOUR QUALITY OF LIFE		Question: LIST SOME OF THE CONDITIONS YOU FEEL THREATEN THE NATURAL RESOURCES AND OPEN SPACES YOU FEEL ARE IMPORTANT TO YOUR QUALITY OF LIFE		Question: DO YOU HAVE SPECIAL ISSUES OR CONCERNS RELATED TO THE OPEN SPACE AND CONSERVATION PLAN	
Orcas	total responses: 18	Orcas	total responses: 18	Orcas	total responses: 18
12 wetlands		10 development/subdivision		4 wildlife/ecological perspective	
10 shoreline access		5 logging		4 tree cutting at building sites	
8 agricultural		5 widening of roads		3 socio-economic diversity	
8 forests		3 large dwellings		1 would like to see more clustering	
8 wildlife habitat		3 tourism		1 ordinances to regulate dwelling size and location	
6 mountains		1 lack of awareness		1 public input (important to maintain)	
3 meandering roads		1 loss of wildlife habitat			
3 walking trails		1 over population			
3 open fields		1 shoreline development			
2 water views					
2 viewpoints					
1 archaeological/cultural sites					
San Juan	total responses: 18	San Juan	total responses: 18	San Juan	total responses: 18
12 forests		11 development		4 wildlife habitat	
11 agricultural		7 logging		3 socio-economic diversity	
7 wetlands		5 trailers		3 water quality	
6 shoreline access		4 over population		2 clustering	
6 water views		4 loss of agriculture		2 public access to open space	
4 wildlife habitat		3 widening roads		2 architectural review	
4 viewpoints		3 shoreline development		1 implementation of plan	
4 mountainsides		3 water quality		1 scenic roads	
3 meandering roads		2 fencing		1 public access to shoreline	
1 walking trails		1 development of exposed hills		1 view access	
1 cultural resources		1 regulatory/planning			
		1 loss of wetlands			
		1 lack of awareness of ecosystem fragility			
		1 oil spill			
Lopez	total responses: 39	Lopez	total responses: 39	Lopez	total responses: 39
39 agricultural		18 subdivision/development		6 incentives for farming	
24 forests		14 logging		4 socio economic diversity	
18 wetlands		14 inappropriate location or size of buildings		4 wildlife habitat	
18 shorelines		8 trailers		4 clustering	
16 wildlife habitat		6 loss of agricultural land		2 public input	
7 water views		6 shoreline development		2 walking easements	
6 walking trails		6 commercial bldgs in rural areas		1 environmentally sensitive areas	
8 viewpoints		5 road widening		1 public access	
3 natural areas		3 ineffective planning			
2 open hillsides/islands		2 loss of shoreline access			
1 rural roads		2 tourism			
		2 rising land values			

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Figure 3. Small Group Responses: Priorities for open space protection

- view down valley with Olympics/marine background (don't cut off)
- panoramas -- i.e. Constitution, Young
- large expanses, Land not fenced into little pieces, contiguous areas
- absence of development
- water views
- view of the water
- not always view -- Sanctuary spot
- preserve heavily viewed areas
- wide open space and undeveloped
- ruralness -- old buildings,
- agriculture
- farmlands
- active AG. use of open space i.e. farming
- productive agricultural land
- farmlands -- all types both view and production
- public Access - shared not "No Trespassing"
- public Accessibility -- not private reserve
- walking trails -- Public and controlled access
- large, continuous, undisturbed views/areas.
- space that has not been infringed upon by human activity.
- places undisturbed by man
- opportunities for humans to use their legs rather than their automobiles.
- spirit of the island -- as living organism
- critical mass - biomes - contiguous areas
- lessen impact of man
- wildlife/botanical habitat (native & diverse)
- use the ecocentric approach rather than the anthropocentric approach to sensitive areas
- areas that combine many forms
- areas reserved for multiplicity and diversity of species
- preserve ecologically sensitive areas
- undeveloped natural areas
- riparian habitat
- tidelands -- change, aroma, full of sand, ecosystem -- birds, shell fish, rocks
- wetlands protected
- large marshland
- forest lands and especially older forestlands preserved to protect air and watersheds, global climate, and prevention of soil erosion.
- places for future old growth
- mountains & ridges
- mature inland forests
- adequate potable water, watersheds, wetlands, lakes, tidal basins, water views

Figure 4. Viewer Employed Photography: Features which detract from the scene

- utility lines/poles
- metal/bright colored roofs
- bright metal buildings
- non-traditional outbuildings
- large structures (massive &/or tall houses)
- metal building close to road (style, color, material, location)
- abandoned car(s)/junkyard
- clearing of land along road
- cleared ridges
- buildings on ridges
- abandoned vehicles on ridges
- structures on hillside w/o screening
- light colored houses on hillsides contrasting
- structures in open fields w/o screening
- structures visible from water (color, materials, no screening)
- non-farm development in farmland
- trailer houses w/o screening/not tied to land
- beach litter
- logging in stream bed
- satellite antenna
- signs (no trespassing/real estate/commercial)
- roads too close to water edge (lake/sound)
- commercial building & parking in field adj to road
- hillside road cuts
- clear cuts (forestry)
- clear cuts (development)
- graffiti
- tall structures
- growing residential density
- telephone building
- community buildings in farmland
- trailers on waterfront
- overgrazing
- houses close to shore (spits, beaches)
- Manure pollution > algae
- disruption of fresh water flow
- filling of wetlands/marsh

Figure 5. Viewer Employed Photography: Features which add to the scene

- farmlands
- pasture lands
- farm activity
- ag. fences & barns
- combined ag/marine views
- native building materials
- pond/lake
- undeveloped northshore shoreline
- no houses visible on ridges/hillsides/cliffs
- houses hidden in trees, inconspicuous
- no houses on road
- no development on hillsides
- uninterrupted ridgelines
- traditional barn structures
- orchard
- farm equipment
- weathered barn
- agricultural ruins
- windrows
- hay & cows
- horses
- sheep
- geese
- cattle
- trees screening structures
- panoramic views
- earthen paints
- madrona trees
- garry oaks
- Olympic Mountains
- Cascades
- Rainier
- Baker
- glacial erratic
- tree lined roads
- forested points
- wildflowers (west side of SJ)
- Moran bridge
- San Juan Valley looking south
- Pear Point Road pastureland
- Trumperer Swan wintering ponds
- unpaved country roads
- marsh/wetlands habitat
- historic structures
- sailboats
- uninhabited islands to view
- modest residences
- houses set back from road, screened by trees
- clustered buildings
- plantings around houses
- view of water
- Port Stanley Pond migratory bird habitat
- buildings tucked into trees
- reuse of existing buildings
- building close to woods
- Camp Nor'western/Sperry Peninsula
- public access to beach

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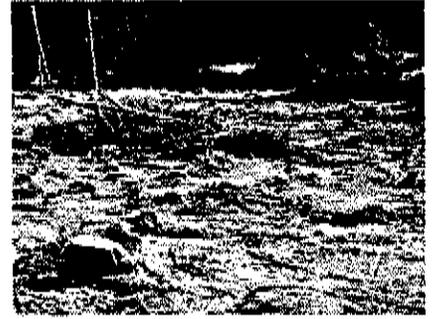
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Figure 6. Most photographed features which detract from the scene



Buildings encroaching on pastures



Logging and land clearing

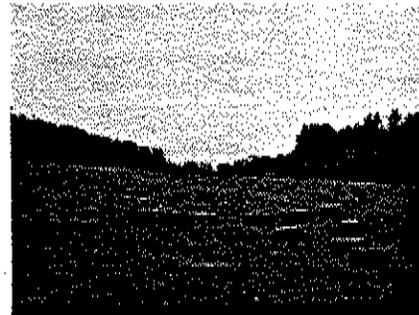


Non-traditional building materials

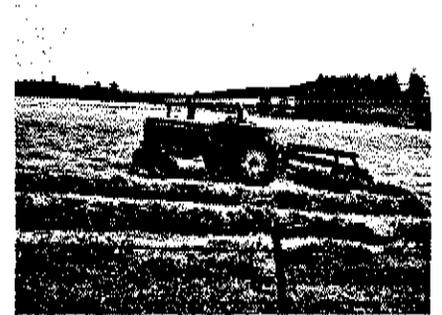


Development close to shoreline

Figure 7. Most photographed features which add to the scene



Farms & pastoral, especially with mountain or water view



Farm activities, paraphernalia and livestock



Hillsides, ridges and shorelines without visible development



Screened development

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Pastoral Landscapes

1.4 Pastoral Landscapes

Protecting the pastoral and rural character of San Juan County is one goal of the Open Space and Conservation Plan. Preference data collected during plan preparation identified pastoral landscapes as an essential element of the quality of life in the County. The key questions are: what are rural and pastoral qualities, how are they manifest in the County, how can their presence be determined, and what conditions enhance or detract from them.

Ruralness and the Pastoral Landscape

The viewer preference tests established several qualities important to the rural and pastoral character of the County. These relate to land use and development, land form and land cover (vegetation types), evidence of or potential for agricultural land use, and the presence of agricultural artifacts.

Pastoral landscapes are generally found in large tracts of grazing and grass lands. These cover several square miles of each of the three larger islands and are punctuated by woodlots, hedgerows and farm complexes. The most dramatic and picturesque are broad, gently sloping valleys bounded by steep, wooded hillsides. Views that overlook these valleys, especially those that include views of water and distant mountains, are particularly prized. Smaller agricultural areas, grassy clearings, and pastures are also found in the islands and valued as open space, especially where they can be viewed from roads, boating channels and ferry routes.

Evidence of current or historical agricultural use, such as livestock, hay bales, farm equipment, barns and outbuildings, hedgerows and orchards, enhance the perception of the pastoral landscape. Nonagricultural use of an otherwise pastoral landscape detracted from its perceived quality.

The character of the road is also important to the rural qualities of pastoral landscapes. Roads that follow topography or section lines, with curves at section corners, trees, fences and other obstructions, are preferred over straighter roads designed for higher traffic speeds.

Agriculture and the Pastoral Landscape

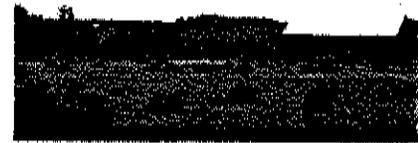
Defending agriculture as a way of life was also important to the community. This suggests that agricultural areas that are not often viewed and areas capable of being productive should be protected as well as those that are visually accessible or in active farm use.

Agricultural areas were defined and mapped based on observed agricultural use during the summer of 1990, and the presence of agricultural soils (Classes II, III and IV) as described and mapped in the USDA San Juan County Soil Survey.

Some open landscapes (flat open, rolling open and low bank open landscape types) appear pastoral but do not have agricultural soils and are not in agricultural use. Where these areas dominate a landscape unit, or where they contribute to the pastoral character of adjacent agricultural areas, their significance as open space resources was found to be as high as those areas in agricultural use.

Assigning Open Space Resource Values to the Pastoral Landscape

Significance scores and weighting of scores for pastoral landscapes are based on the presence of valued landscape qualities (as expressed by viewer preferences). Pastoral



The Valley, Lopez Island



Crow Valley, Orcas Island



Blazing Tree, San Juan Island

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Pastoral Landscapes

Agricultural Soils include soils defined by SCS and Department of Community Development as Prime Farmland

Prime farmland is not limited to Class I or II soils: "Prime farmland is land best suited for producing food, feed, forage, fiber and oilseed crops, and also available for these uses (the land could be cropland, pastureland, rangeland, forest land or other land but not urban builtup land or water). Prime farmland has soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management according to modern farming methods."
 (Source: USDA Soil Conservation Service National Soils Handbook)

Symbol	Mapping Unit Name	Acres
(Be)	Bellingham silt loam	1,410
(Be)	Bellingham clay loam	390
(CaA)	Coveland silt loam, 0 to 3 percent slopes	5,290
(CaB)	Coveland silt loam, 3 to 8 percent slopes	850
(CoA)	Coveland gravelly silt loam, 0 to 3 percent slopes	1,160
(CoB)	Coveland gravelly silt loam, 3 to 8 percent slopes	790
(Nm)	Norma loam	460
(No)	Norma loam, moderately deep	140
(Sm)	Semiahmoo muck	1,370
(St)	Semiahmoo muck, shallow	310
Total acres prime farmland		12,170

(Source: Prime farmland of San Juan County, April 1980 and USDA SCS Soil Survey 1962)

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landscapes and agricultural use were the open space resource element most important to the community. The scores are based on three tests, with scores from 0 to 3, and a possible weighted score of up to 12. (Only steep slopes can achieve a score as high as a pastoral landscape - see Appendix 1.5: Prominent Geographic Features.)

Test 1: Active agricultural areas

Test 2: Areas of agricultural soils

Test 3: Rolling open and flat open landscape types not dominated by nonagricultural development

Score:

- 3 Unit is dominated by:
active agricultural areas or
areas of agricultural soils
- 2 Unit is dominated by open landscape types or
Unit contains (but is not dominated by)
active agricultural areas or agricultural soils
- 1 Unit contains (but is not dominated by)
rolling open or flat open landscape types
- 0 No pastoral landscapes evident

(NOTE: These tests and scores are designed for application to individual parcels as well as to landscape units.)

Sensitivity of Pastoral Landscapes

Pastoral landscapes are among the most sensitive to visual intrusion by nonagricultural development. Their flat and open character generally lacks topographic relief or vegetation that could conceal nonagricultural uses. Rolling open landscape types are slightly less sensitive since new development could be concealed in the topographic relief.

Agricultural use of the pastoral landscape is also sensitive to displacement by other uses. The community expressed the desire to encourage continued agricultural use and discourage conversion to other uses.

The community identified scenic roads through many pastoral landscapes, so that visual accessibility is an important element of their sensitivity. Dividing large expanses of these landscapes or blocking views across them with new vegetation reduces their open space qualities, as does reforestation when agricultural use is abandoned or, in some cases, adding vegetation to screen development.

Conclusion

The pastoral landscape of San Juan County is an essential open space resource valued highly by the community for its visual and functional qualities. It occurs in large and small tracts; some are farmed and others are simply grass land. It is sensitive because it is often highly accessible visually and because its open character makes it hard to conceal nonagricultural development. Also, its open space value is enhanced by distant views to water, mountains, prominent geographic features, or high contrast edges.

Prominent Geographic Features

1.5 Prominent Geographic Features

Within the regional landscape of San Juan County a number of features are memorable because of their position or scale in the landscape. They are emblematic of the region or are strongly identified with a particular place. The vividness of these places attests to their importance as prominent geographic features. Maintaining the undeveloped or pastoral quality of these features and their foreground view corridors are important open space resource conservation objectives expressed by the community.

Related qualities are landscape diversity and landscape edges, also discussed in this section. Landscape edges occur where different landscape types meet and where the land meets the water or sky. Contrast in landform, color and vegetation patterns makes some edges significant open space features, especially when related to prominent geographic features.

The diversity of the San Juan landscape is a common theme in the literature and the community preference testing. Diversity refers to the variety of landscape types found in the county and within landscape units. The visual interest of different landforms and vegetation types, contrasted against each other and the water and sky adds to the quality of many landscape units. Homogenizing the landscape by adding dominant elements, or by eliminating some elements detracts from open space quality.

Documenting Prominent Geographic Features

Prominent geographic features include natural landmarks, focal points, bays-of-islands and points of arrival.

Natural landmarks include major topographic features, such as Turtleback Mountain, which dominate several landscape units or are distinguishable from a great distance. Significance scoring for natural landmarks with steep open slopes is extremely high (4) and very high (3) for those with forested slopes.

Focal points may be less dramatic than landmarks but occupy a prominent position in the landscape because of circulation and gathering patterns. Whether on axis with or encircled by lines of travel, they are relied upon as way-finding features. They form a visual and/or physical boundary to a path of travel and are scrutinized by all passersby. Significance scoring for focal points with steep open slopes is extremely high (4) and for wooded areas very high (3). Focal points include places like Upright Head, a dramatic point of land around which the ferries turn, and the hillside of San Juan Island facing Wasp Passage.

Bays-of-Islands are small archipelagos within the larger San Juan archipelago. They are a landscape type unique to the county in which many small islands are grouped within a bay or channel. They are often entirely wooded, though some are barren, and have little or no development evident. Bays-of-islands are fascinating and desirable features viewed from land, the ferry, or passing boats. They are important features of the landscape of the county, marking progress through the passages, guarding the openings to channels, and helping to shelter bays facing the straits. As prominent geographic features, bays-of-islands are scored very high (3) in significance, reflecting their uniqueness and importance to the open space resources of the county.

Inland water features such as lakes, ponds and open water are highly valued geographic features. Though visible from a smaller area than landmarks and focal points, inland water features help punctuate travel across the islands. Views of and across these



*Cady Mountain, San Juan Island.
Natural landmark with silhouetted
ridge.*



*Zylstra Lake, San Juan Island.
Lakes and ponds are prominent
geographic features.*

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Prominent Geographic Features

features to undeveloped shorelines are important open space resources. Significance scoring for inland open water is high (2).

Bays, harbors and points of arrival are less dramatic points of interest but are also relied upon for way-finding. As such, more attention is paid to the visual quality of the shore and uplands surrounding them. Significance scores for bays, harbors and points of arrival are medium (1).

View corridors for prominent geographic features are mapped. These are the foreground areas which create the scenic context for viewing a feature from public places and thoroughfares (see Appendix 1.7: Visual Accessibility).

Test:

Presence of prominent geographic features such as natural landmarks, bays-of-islands, focal points, lakes, bays, harbors and points of arrival.

Scoring:

- 4 Natural landmark or focal point with a steep open slope
- 3 Bay-of-Islands, Focal Point or Natural Landmark
- 2 Lake, pond and open water
- 1 Bay, harbor or point of arrival

Sensitivity of Prominent Geographic Features

Prominent geographic features are powerful visual elements which draw extra scrutiny to a specific area where incongruous elements may become particularly visible. They are sensitive to changes in the visual quality of the feature itself and the foreground or view corridor for the feature based on the ability of the landscape type to conceal change. The landscape types commonly associated with natural landmarks and focal points are high and very high in sensitivity, (2 or 3) and often high and very high (2 or 3) in visual accessibility.

Conclusion

Prominent geographic features and their view corridors should be protected from disruption by controlling the location of new construction, requiring the protection of existing vegetation and minimizing slope disruptions, and requiring new screening, so that the visual quality of these resources is conserved.

Prominent Geographic Features

Landscape Edges

A related element of the landscape is contrasting edges. Contrast is a fundamental visual characteristic which makes objects visible. Differences in material, color, value, texture, aspect and orientation are visible where two unlike surfaces meet. In the landscape, contrast is evident where two different landscape types meet, and where the landscape meets the water or the sky. Disruption of the edges between contrasting landscape types, sky and water are more readily seen than similar construction set in a low contrast setting.

Documenting Landscape Edges

Landscape edges were identified using the landscape type maps, field studies and topographic maps. Significance scoring was based on the presence of contrast between landscape types such as sloped-forested adjacent to flat-open, the shorelines of marine landscape types, and silhouetted ridges.

Landscape edges are generally significant open space features only when viewed from open landscape types, or across water. The mapping symbols for landscape edges (found in the map folio with prominent geographic features) show the directions of views.

Test:

There are contrasting landscape types or high contrast edges

Scoring:

- 3 Flat Open adjacent to Sloped Forested or Shoreline of High Bluff Forested or Silhouetted ridges of natural landmarks or focal points
- 2 Flat Open adjacent to Rolling Forested or Low Bank Open adjacent to Rolling Forested or Bay-of-Islands and all other shorelines or Other silhouetted ridges
- 1 Any forested type adjacent to any open type or Any flat type adjacent to any sloped type
- 0 No contrasting landscape types found

Sensitivity of Landscape Edges

Contrast between land form and land cover is important because it helps to define and emphasize visual qualities of each landscape element, but it is sensitive to interruption from clearing and construction. High contrast edges should be protected by preventing their disruption through placement of structures or clearing and grading operations.

Landscape contrast is often dramatic in the islands. The steep slopes, varieties of land cover conditions, and the ever-present water provide a wide range of contrasting conditions. The visibility of disruptive elements in the landscape can be accentuated by their relationship to high contrast edges.

As an example, forested slopes can be divided into three primary visual elements: the body of the forest itself, the edge of the forest where it meets the water or flat-open landscape, and the edge where it meets the sky. The edge where the forest meets the sky is high in contrast, showing the smooth silhouette of trees. Clearing for new construction at the ridge would interrupt the silhouette, drawing attention to the



Silhouetted ridge of Turtleback Mountain, Orcas Island.

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change, even if the new construction itself blended into the scene.

The high contrast edge at the bottom of a wooded slope where it meets a flat-open landscape is generally close to horizontal and straight. New construction in front of this edge, or clearing which changes the shape of the edge interrupts this horizontal line and increases its visibility.

Similarly, the contrasting edge at the water/land interface forms a nearly straight line, which can be contrasting in color as well. New construction located at that edge is visible and disruptive not only because of the clear visibility across the water but because of the interruption of the high contrast edge between land and water.

Prominent Geographic Features

Diverse Natural Landscapes

The diversity of the landscape appeared in many forms in the public preference testing process. Diversity refers to both visual and ecological qualities. As a visual feature, diversity refers to the variety of different landforms and landscape situations which occur in the County. Edges and transition areas can be important for wildlife habitat for some species but are not favorable for species requiring larger areas of homogeneous habitat features. Diversity from an ecological standpoint must therefore be addressed on an individual species basis to optimize habitat features for selected priority species. For the purposes of this study, diversity addresses the visual aspects of variety in the landscape as a characteristic contributing to the overall quality of an entire landscape unit. Reducing diversity by eliminating one type of land cover, or introducing a development pattern which dominates the landscape reduces the overall open space value of the entire unit. Evaluating development proposals in regard to diversity will require consideration of the entire context within which the development is proposed.

Documenting Landscape Diversity

Landscape diversity was documented by counting the number of landscape types found within each landscape unit. Units with many different landscape types scored high, those with fewer types scored lower.

Test:

Diversity of landscape types within a landscape unit

Scoring:

- 3 5 or more landscape types present
- 2 3 to 4 landscape types present
- 1 1 to 2 landscape types present

Sensitivity of Landscape Diversity

Areas of diverse natural landscape elements are both visual and ecological resources and should be maintained by 1) preventing disruption of diversity by land use and development which, through clearing, revegetation or construction, would introduce a dominant visual character, and 2) screening new development from public views.

**Prominent Geographic
Features**

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Water, Shoreline & Mountain View Landscapes

1.6 Water, Shoreline and Mountain View Landscapes

Views of Puget Sound, the straits, channels, fjords, small islands, undeveloped shorelines and lakes of the San Juan islands are often-mentioned visual resources of the County. Views which are ultimately bounded by the distant Cascade or Olympic Mountains are particularly prized, and if they occur with a pastoral foreground the quintessential San Juan view is found. These views which in part define the unique character of the San Juan Islands.

Publicly accessible views with some or all of these characteristics are common and precious in the islands, but are easily disrupted by residential or other development which either detracts from the rural character of the foreground or bounding hillsides, or blocks the view altogether.

Documenting Water, Undeveloped Shoreline and Mountain View Landscapes

Water, undeveloped shoreline and mountain view landscapes are defined as those areas in the foreground of a publicly accessible view of water, undeveloped shorelines or mountains. The areas which form the foreground of these views are commonly referred to as a view corridors, and are recognized as important features within scenic landscapes. These areas were documented through field observation, the Viewer Employed Photography (VEP) exercise and map studies. (These views, viewpoints and view corridors are mapped under Prominent Geographic Features in the map folio.)

For the purposes of this plan, undeveloped shorelines include only public shorelands shown in Your Public Beaches-San Juan Region-1984, prepared by the Washington State Department of Natural Resources, and undeveloped shorelines of other conservation lands (see Appendix 1.8: Conservation Lands, and the Conservation Lands map in the folio). The uplands behind many public beaches could be developed. Further documentation should be conducted using current aerial photography and a shoreline survey to improve accuracy and broaden the scope of the area covered.

Significance scoring for water, shoreline and mountain view landscapes reflects the importance given to the unique relationship of the islands to the pastoral landscape. The highest score (3) is given to views over a pastoral foreground. Publicly accessible viewpoints, such as those found at the county, state and national parks, with views of the water, undeveloped shorelines or mountains, are also scored highly.

For a high score to be possible, the view or viewpoint must be located on a main public road or scenic route (see Appendix 1.7: Visual Accessibility). Undeveloped shorelines must be viewed from a public place or ferry route to achieve a high score.

Water, undeveloped shoreline and mountain view landscape views with poor access are scored slightly lower (2). Poor access simply means that the view point is located on a minor public road, or in the case of undeveloped shorelines, along a main boating channel. Where no public access is provided, or where there are only unimproved roads, and in areas where water, shoreline and mountain view landscapes are only a minor element of the unit, the score is 1. No score is entered where there are no such views documented.



View over pasture to water, Orcas Island.



Undeveloped shoreline.

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**Water, Shoreline & Mountain
View Landscapes**

Test:

Water, undeveloped shorelines or distant mountains visible as a dominant feature from or within the unit. Includes salt water, open water wetlands, ponds and lakes, shorelines without visible development, and the Olympic, Cascade and Vancouver Island mountains.

Scoring:

- 3 Feature at the end of a pastoral vista *or* publicly accessible viewpoint
- 2 View across water to another island *or* a water/mountain view with poor public access
- 1 Minor presence *or* water/mountain view with no public access
- 0 No water or mountain views evident

(NOTE: The test and scoring are designed to apply to individual parcels as well as to landscape units.)

Sensitivity of Water, Undeveloped Shoreline and Mountain View Landscapes

Water, undeveloped shoreline and mountain view landscapes are sensitive to view blockage or degradation by new construction. As a foreground for dramatic scenic features, the rural quality of these landscapes is critical to the value of the scene as a whole. For pastoral landscapes with these views, where change cannot be readily concealed, the significance score of 3 serves emphasizes its importance to the unit and the county as a whole.

Where the water, shoreline and mountain view landscapes do not include a pastoral foreground, they are sensitive to blockage from development adjacent to roads or viewpoints, and to degradation of features that frame or limit the view, such as steep hillsides.

Undeveloped shorelines viewed from adjacent islands or ferry routes are sensitive to the addition of development visible across the water which detracts from the appearance of rugged solitude.

Conclusion

The water, undeveloped shoreline and mountain view landscapes of the county are unique to the San Juans, much valued by residents, and sought after by visitors. Their quality is highest when least influenced by non-agricultural development. They are often very sensitive to change.

These resources should be protected by 1) locating new development to avoid degrading views from public thoroughfares and places, 2) locating and/or screening development to reduce its visibility within view corridors, and 3) locating and/or screening to reduce visibility across water from public thoroughfares, including ferry routes, main boating channels, and public places.

Visual Accessibility

1.7 Visual Accessibility



Center Road on Lopez Island is a main thoroughfare.

Visual accessibility is not an important open space quality by itself, but is a means of prioritizing other significant resources and testing the effects of potentially disruptive change in the landscape. Though there are many inaccessible places in the county which are important open space resources in need of protection, it is those which form the everyday landscape of the county which are most emblematic of the San Juan experience and at the same time most threatened by change.

Visual accessibility is a factor in establishing sensitivity as well as significance for landscape units and particular parcels. The view corridors referred to in the prominent geographic features and water, undeveloped shorelines and mountain view landscape sections, are examples of the importance of visual accessibility.

Determining Visual Accessibility

This criterion determines whether a place is visible from publicly accessible viewpoints and thoroughfares. Public places are those places commonly used for viewing the landscape and seascape. They are generally public parks and ferry landings, but also include unofficial overlooks and waysides. Scores for landscape units which contain public places are very high (3), and scores for units which are visible from a public place are scored high (2). Scores for parcels adjacent to or visible from a public place within the same unit are scored very high (3), and high (2) for parcels visible from public places in other units.

Main thoroughfares include ferry routes, main roads and scenic roads. Main roads are those public roads in the county which are most heavily travelled and which connect common destinations and settlements. Scenic routes were identified using responses to the community preference exercises. Main boating channels are those channels commonly travelled by boats other than ferries, passing through or going from point to point within the county. Minor public roads are less travelled or unimproved roads not included in other categories.

Scores for units containing main thoroughfares are very high (3), and high (2) for units visible from a main thoroughfare or contain a main boating channel. Units and parcels which can only be seen from minor roads or seldom travelled channels have a medium (1) score.

Test:

Landscape is visible from a public place or thoroughfare

Scoring:

- 3 Ferry route or main public road passes through or adjacent to unit from which much of the unit is visible or
Public place located within unit
- 2 Unit visible from (does not contain) ferry route, public place or main public road or
Main boating channel passes through or adjacent to unit from which much of the unit is visible
- 1 Unit contains a minor public road or a seldom travelled channel
- 0 No public access provided

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Visual Accessibility**Conclusion**

Visual accessibility is an open space characteristic which qualifies other significance scores. If a significant open space resource is visually accessible the public is more sensitive to its quality and to potential change.

Contributing to Existing Conservation Areas

1.8 Contributing to Existing Conservation Areas

A common principle which surfaced throughout the public participation process and which is important in resource conservation in general, is to protect adequate quantities of a resource to maintain its viability. Open space resources which contribute to the value of existing conservation lands, or provide buffers between these lands and incompatible uses, were identified using this significance criteria. These resources would make valuable additions to the existing conservation lands or provide important buffer zones for that land.

Documenting Conservation Land

Conservation lands include areas managed for conservation purposes by federal, state and county agencies, or private non-profit organizations including the National Parks Service, US Fish and Wildlife Service, Bureau of Land Management, US Coast Guard, Washington Departments of Wildlife and Natural Resources, State Parks and Recreation Commission, University of Washington, Town of Friday Harbor, county parks, The San Juan Preservation Trust, The Nature Conservancy, and public tidelands and beaches.

Determining Significance

Determining whether areas contribute to the value of adjacent existing conservation lands required comparing the significance scores for other resources with the conservation lands map to test for proximity. However, the presence of existing development which detracts from open space qualities reduces the potential value of contribution to conservation lands. If significant open space resources were found adjacent to existing conservation lands the significance score for that resource was entered in this category. Exceptions were made where existing, non-agricultural development is found in the resource area being considered.

Test:

Landscape contains areas adjacent to existing conservation lands with high significance scores for Wetlands, Wildlife Habitat, Pastoral Landscapes, Water Shoreline & Mountain View Landscapes, Prominent Geographic Features, Landscape Edges and/or Uniqueness, and with little or no existing development.

Scoring:

Landscape contains highly scored areas adjacent to existing conservation areas with:

- 3 Significance score 3 / existing development score 3
- 2 Significance score 2 / existing development score 3 or Significance score 3 / existing development score 2
- 1 Significance and existing development score of 2 or 1
- 0 No existing conservation or sensitive natural areas present or no appropriate additions adjacent

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**Contributing to Existing
Conservation Areas****Sensitivity**

Existing conservation areas are sensitive to disruption from new construction in areas which contribute to the visual quality of the resource. Sensitive to reduction of significance of constituent landscape types and qualities. See Pastoral Landscapes, Water /Mountain View Landscapes, Prominent Geographic Features, Landscape Contrast, and Uniqueness and Existing Development.

Conclusion

Existing conservation lands are found throughout the islands, ranging from small easements to very large parks. Each of these conservation areas is influenced by the character and quality of the surrounding landscape and seascape. Protecting and enhancing the open space value of existing conservation lands can be achieved by identifying significant open space resources which contribute to the context and qualities of these areas and prioritizing their protection.

Natural Resources

1.9 Natural Resources

The ecological health of the landscape was emphasized by many throughout the public participation process as an important element of the Open Space and Conservation Plan. Improving the protection of natural resources is also drawing attention at the state and national level. Provisions of the Growth Management Act passed during the course of the preparation of this plan require local governments to identify and plan for protecting natural resources. Wetlands, wildlife habitat and sensitive plant communities elements of the natural resource inventory and analysis for the Open Space and Conservation Plan.

Documenting Wetlands

Many community participants expressed concern for wetlands as an important natural resource, providing valuable wildlife habitat, serving an important function in the freshwater cycle of the islands and contributing to the rural open space qualities of the islands. State and national attention is also turning to the importance of wetlands for these reasons, requiring more local protection.

Wetlands mapping was conducted on a national scale and published in 1987 by the US Fish & Wildlife Service in the National Wetlands Inventory (NWI). The NWI used high altitude aerial photography and interpretation to delineate wetlands. The inventory is useful for locating the general presence and extent of the wetlands classifications covered, but is limited in its accuracy, comprehensiveness, and usefulness for regulatory purposes. The Washington Department of Ecology is preparing a more detailed method for local agencies to identify and classify wetlands which will be useful for the County in delineating wetlands and implementing a wetlands protection ordinance.

For the purposes of this plan, wetlands were mapped using the NWI, and were scored based on presence or absence of mapped wetland areas within Landscape Units. Further studies should be conducted to more accurately establish the locations, extent, values and functions of the wetlands of the county for the purposes of protecting their ecological value. Until a county wetlands inventory and ordinance is developed the visual open space qualities of wetlands must rely on wetlands falling within the pastoral landscapes, prominent geographic features, and water view landscapes mapped elsewhere in the plan.

Test:

Areas that appear in the National Wetlands Inventory.

Scoring:

(pending adoption of a county wetlands ordinance)

NWI Wetlands shown in the NWI

(no entry) No wetlands mapped

Sensitivity of Wetlands

Wetlands resources are sensitive to clearing, grading or construction which could directly or indirectly alter the soils, vegetation, air quality, water quality and quantity, or disrupt wildlife. The visual qualities of wetlands are sensitive to new construction based on the Landscape Types in which they occur (Flat-Open, Flat-Forested, etc.) and should be protected from intrusion by setbacks and screening.

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Conclusion

While wetland conservation will not be widely effective before a comprehensive inventory can be completed, it can be advanced in the interim by applying protective regulations based on those contained in the Wa DOE model wetlands protection ordinance to wetlands identified on the National Wetlands Inventory maps prepared by the USFWS and surveyed on a project-by-project basis. Adoption of such an ordinance should be pursued immediately and followed with preparation of a comprehensive inventory which specifically identifies the location, type, functions and values of wetlands countywide.

The visual qualities as well as the ecological values of wetlands which are visible from public places and thoroughfares should be protected by the wetlands ordinance from disruption resulting from new construction.

Wildlife Habitat and Significant Plant Communities

The diverse landscape of San Juan County provides habitat for a number of wildlife species, some of which are listed as threatened, endangered or sensitive. The seasonal range or habitat features necessary for the continued viability of these species are protected under federal, state and local regulations designed to maintain and/or improve the long term health of the species locally and on a regional scale.

The Priority Habitats and Species program being developed by the state Department of Wildlife provides the opportunity for local jurisdictions to participate in identifying species and habitats of local significance which can then be included in an environmentally sensitive areas ordinance or critical areas overlays required by the Growth Management Act and state conservation programs.

Documenting Wildlife Habitat and Significant Plant Communities

Wildlife habitat and significant plant communities were documented using existing information sources provided by the county and state agencies including state and federal listings of threatened, endangered and sensitive wildlife species, plant species and plant communities, and a report prepared by The Nature Conservancy identifying significant natural areas.

Community participants also identified areas which they felt contained significant wildlife and plant resources. Local authorities were interviewed to further broaden the scope of natural resource information.

Locations for threatened, endangered and sensitive species are confidential information controlled by the regulating agency. Mapping for the Open Space and Conservation Plan shows only the general location (by one square mile section) and classification (plant or animal) for these resources. Significance scoring for Landscape Units shows only whether there are listed species mapped in the unit.

More detailed studies should be conducted to establish natural resources of local significance which can be protected through the Department of Wildlife Priority Habitats and Species Program and local regulations or acquisition programs.

Natural Resources

Test: Seasonal range or habitat element with which Priority Species have a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long-term.

Test: An area that contains native plant species or communities of federal, state or local significance.

Scoring:

Listed Federal or state listed Priority Species.

Listed Contains federal or state listed native plant species or communities.

(future) Priority Species of local significance.

(future) Contains native plant species or communities of local significance.

Sensitivity of Wildlife Habitat and Special Plant Communities

Wildlife habitat is sensitive to destruction through removal of habitat features or in some cases by introduction of incompatible elements. Habitat features and management objectives need to be composed on a species specific basis, but generally rely on preventing disruption of existing vegetation, drainage, food and circulation patterns, and preventing the introduction of structures, vehicles, people and sources of noise.

Significant plants and plant communities are sensitive to destruction of specimens or necessary habitat features and conditions or in some cases introduction of incompatible elements or competing species. Management objectives for plants are also species specific but generally refer to preventing disruption of existing soils, vegetation and drainage patterns.

Conclusion

Threatened and endangered plant species are protected under state and federal legislation, which can and should be reinforced with local conservation action.

While the WDW maintains records of the occurrence of endangered, threatened and sensitive wildlife species, and the DNR Natural Heritage Program retains similar records for plant species, species which don't qualify for state or federal level monitoring but which are important locally have not been named and their habitats have not been identified. This must occur for those habitats can be conserved.

These species of local significance, which are not presently protected, could be under an Environmentally Sensitive Areas ordinance and amendments to the Comprehensive Plan. The county should enlist assistance of the WDW Natural Heritage Program to provide the information necessary to identify these resources and evaluate the need for their protection.

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Natural Resources

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Resource Interpretation and Analysis

2.0 Resource Interpretation and Analysis

2.1 Significance

The previous appendices described the inventory of open space resources which were found to be significant to the community and showed how the significance values were determined for each landscape unit. The following summarize the scoring process and results.

Significance

Significance is an expression of the relative importance to the community of various landscape elements. This section summarizes the significance scoring process and results.

Prioritizing Significance

Some open space resources, such as pastoral landscape and natural resources, were preferred almost universally. This suggests that greater attention should be paid to their protection. Significance scores were weighted to assign emphasis to each significance criterion based on public preference.

The weighted scores for each unit were then added together to give a unit significance score. The unit significance score reflects the relative open space value for the whole unit. High scoring units have many significant resources, usually contributing to one highly valued scene.

This does not mean that landscape units with fewer significant resources are unimportant. Conservation measures should be used to protect all open space resources found in an area and the interrelationships between individual resource types should be recognized.

Natural resource values were not scored or weighted. Their significance must be established on the basis of individual occurrences, with a resource-specific inventory and analysis effort. The significance summaries for each unit do indicate the presence of certain natural resources which should be considered when acquisition or regulatory action is contemplated in the unit.

Significant landscape elements and landscape conditions include pastoral landscapes (4 - Extremely High), water and mountain views (3 - Very High), prominent geographic features (3 - Very High), lack of development (2 - High), ecological and visual diversity (1 - Medium), sharp definition of edges in the landscape (2 - Medium), and uniqueness (2 - High).

Figures 2.1, 2.2 and 2.3 show the significance scores and weighted totals.

Summary Mapping of Significant Open Space Resources of San Juan County

A summary map of the most significant open space resources was prepared to show where high scoring resources are found and which areas contain overlapping open space values. The Significance Summary Map (see Map Folio) was used in conjunction with a map summarizing Potential for Change (see Appendix 2.3) to identify vulnerable resources. The Significance Summary Map shows which areas have very high and extremely high significance scores in each unit.

San Juan County

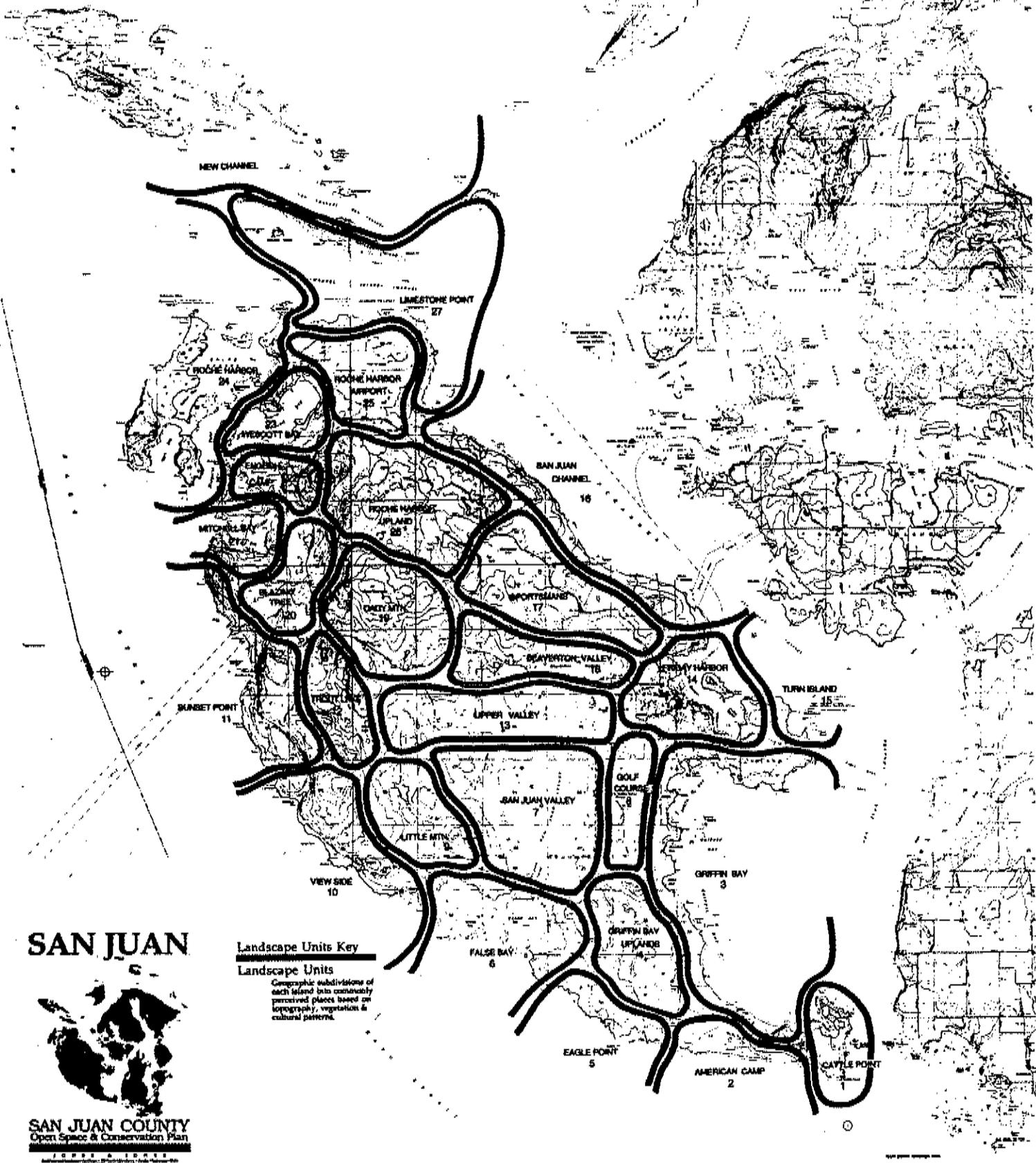
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Resource Interpretation and Analysis



SAN JUAN



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SAN JUAN District

Significance	Unit#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Unit Castle Amerit-Griffin Griffin Eagle Palse SJ Golf Little View Sunset Trout Upper Friday Turn San Jut Sports-Beaver Cady Blazing Mitche Engital Westoc Roche RH RH Limesh																													
Criteria	Name	Point	Camp	Bay	Upland	Point	Bay	Valley	Course	Mtn	Side	Point	Lake	Valley	Harboisland	Channmans	Valley	Mtn	Tree	Bay	Camp	Bay	Harbor	Alrpor	Upland	Point			
1	Pastoral	8	12	8	12	0	8	12	12	8	0	0	0	12	0	4	0	8	12	4	12	4	0	4	0	8	8	8	0
landscapes																													
2	Water/mountain	9	9	6	9	6	9	9	6	0	9	3	0	9	9	9	9	3	3	0	6	9	9	9	9	9	0	0	3
view landscapes																													
3	Prominent	3	12	3	0	3	3	3	0	6	12	0	0	0	6	3	6	6	0	12	0	3	6	3	9	0	0	0	12
geographic features																													
4	Rural	-4	6	2	4	4	4	6	2	2	2	4	6	4	-6	-2	0	2	6	6	6	2	6	4	2	4	6	2	
development pattern																													
5	Diversity	3	2	3	1	2	3	2	1	2	2	3	1	2	2	2	1	2	2	2	2	2	2	2	1	2	1	1	
6	Landscape	1	2	2	0	2	2	3	1	2	1	2	2	2	2	2	2	2	1	2	3	2	2	1	2	1	0	1	
contrast																													
7	Uniqueness	4	6	2	0	2	6	6	0	2	6	0	0	2	4	2	2	2	2	0	0	0	6	0	6	0	0	2	
8	Visual	3	3	2	3	1	2	3	3	3	3	1	1	3	3	3	3	3	3	3	3	1	3	1	3	3	3	3	
accessibility																													
9	Contributing to	3	3	2	3	2	3	3	0	2	3	3	1	3	0	3	2	3	0	0	0	3	3	2	3	2	3	0	1
existing resource																													
conservation areas																													
Total weighted	score	30	55	30	32	22	40	47	25	27	38	16	10	35	18	28	25	37	29	32	26	20	37	26	43	20	18	25	

Natural Resource Criteria

| 1 | Wellands* | NWT | NWI | Listed |
|---|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2 | Wildlife habitat** | Listed |

*"NWI" indicates wetlands appear in the National Wetlands Inventory. ** "Listed" indicates federal or state listing of significant plant or animal species.

Resource Interpretation and Analysis

Figure 1 Landscape Units (left) and weighted significance scores, San Juan District.

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Conservation

Resource Interpretation and Analysis

ORCAS

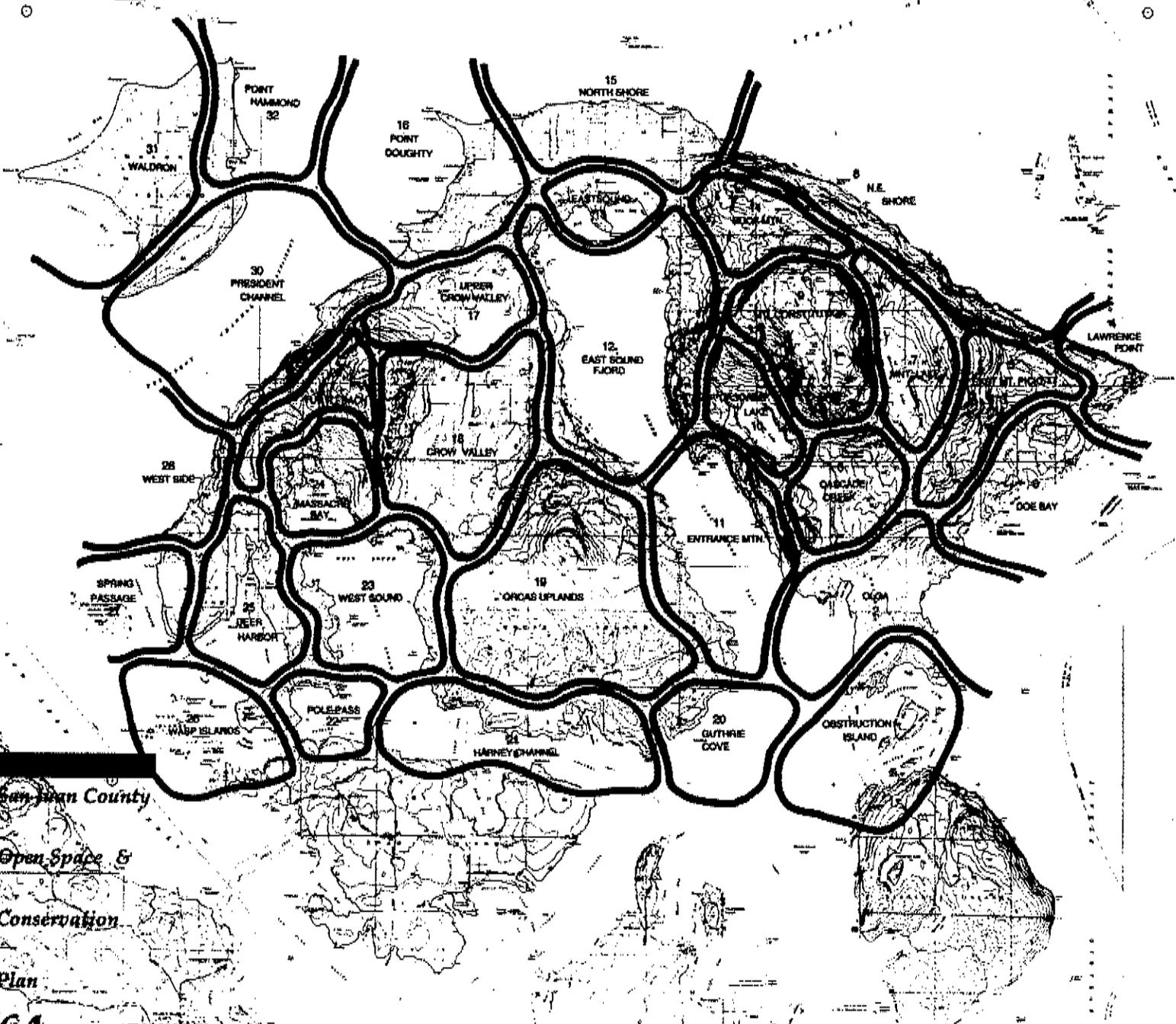


SAN JUAN COUNTY
Open Space & Conservation Plan

Landscape Units Key

Landscape Units

Geographic subdivisions of each island into commonly perceived places based on topography, vegetation & cultural patterns.



San Juan County
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Resource Interpretation and Analysis

Figure 2 Landscape Units (left) and weighted significance scores, Orcas District.

ORCAS District

Significance	Unit#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
Unit: Ostr Olga Doe Lawn E Mt Casca Mtn NE Mt Casc E mtn Easton East Buck North Point Upper Crow Orcas Guhn Harm Pole West Mass Deer Wasp Spring West Turtle Presic Wald Point																																				
Criteria	Name	Island	Bay	Point	Picke	Creek	Lake	Shore	Coast	Lake	Mtn	Fprd	Soun	Mtn	Shore	Doug	Crow	Valley	Uplar	Cove	Char	Pass	Soun	Bay	Harb	Island	Paag	Side	Back	Channel	Hanc					
1	Pastoral landscapes	0	8	8	0	0	8	0	0	0	0	0	8	0	8	4	12	12	8	0	4	0	8	4	8	0	0	0	0	0	0	8	8			
2	Water/mountain view landscapes	9	9	9	6	3	0	3	3	9	9	6	9	9	6	9	3	3	3	9	9	9	9	9	9	9	9	9	6	6	3	3	9	6		
3	Prominent geographic features	3	3	3	6	3	6	9	9	9	9	9	9	9	6	9	3	3	9	6	6	9	12	12	9	9	9	9	3	9	6	6	6	6		
4	Rural development pattern	2	2	2	6	6	4	6	4	6	4	6	4	6	4	-6	4	6	6	4	4	2	4	0	4	-2	6	2	2	6	4	6	4	6	6	
5	Diversity	2	3	3	2	1	1	1	1	2	2	3	3	1	2	3	2	2	2	1	2	1	2	1	2	3	2	1	1	2	2	1	3	2	2	
6	Landscape contrast	3	3	3	3	0	1	0	3	0	2	3	3	1	1	3	3	3	2	2	3	3	3	3	3	2	2	3	3	1	3	3	2	3	2	
7	Uniqueness	2	4	6	4	6	4	4	2	6	4	6	6	6	4	2	4	4	6	2	6	6	6	6	6	6	2	6	2	2	6	2	4	6	4	4
8	Visual accessibility	2	3	2	1	1	3	1	2	3	3	2	2	3	3	3	1	3	3	2	3	3	3	3	3	3	2	3	2	1	1	1	1	1	1	1
9	Contributing to existing resource conservation areas	2	2	2	3	3	2	0	2	3	3	0	2	1	0	0	0	0	3	2	0	0	3	0	0	1	3	2	2	3	2	2	3	2	3	1
Total weighted score		25	37	38	31	23	29	24	26	37	36	37	36	34	23	22	25	36	47	34	31	35	38	43	44	33	39	27	21	31	24	45	36			

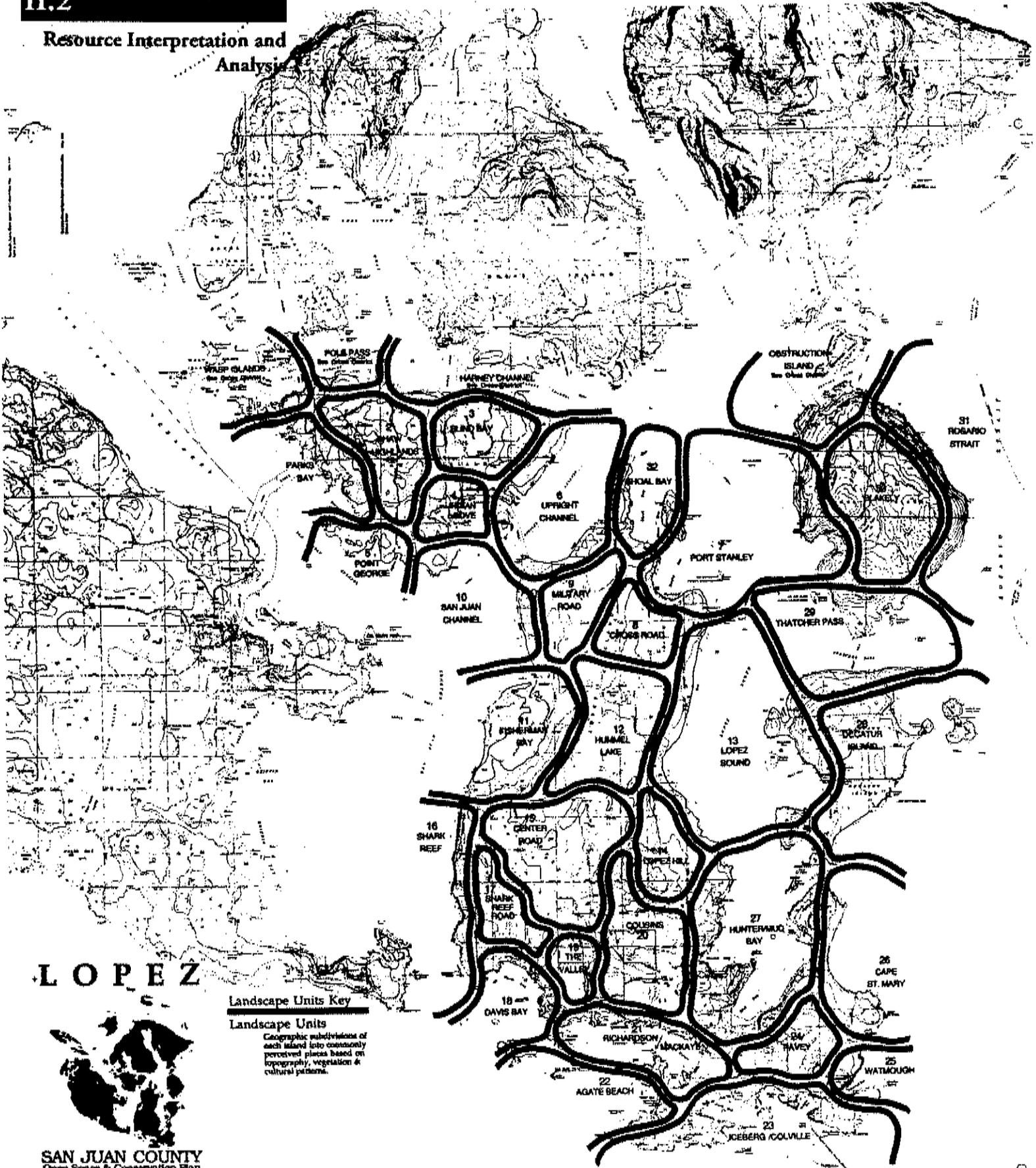
Natural Resource Criteria

1 Wetlands*	NWT	NWI	NWJ	NWV	NWP	NWR	NWS	NWT	NWI	NWJ	NWV	NWP	NWR	NWS	NWT	NWI	NWJ	NWV	NWP	NWR	NWS	NWT	NWI	NWJ	NWV	NWP	NWR	NWS	NWT	NWI	NWJ	NWV	NWP	NWR	NWS	
2 Wildlife habitat**	Listed																																			

* "NWT" indicates wetlands appear in the National Wetlands Inventory. ** "Listed" indicates federal or state listing of significant plant or animal species.

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LOPEZ



Landscape Units Key

Landscape Units

Geographic subdivisions of each island into consistently perceived places based on topography, vegetation & cultural patterns.

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LOPEZ District

< Shaw Lopez >

Significance	Unit #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
Unit Parks Shaw Blind Indian Point Uprig Port Cross Mills San Ju Fishes Huron Lopez Lopez Centre Shark Shark Davis The Cousi Richr Agate febe: Pavey Water Cape Hunt Decat Thaic Blake Rosar Shoal																																				
Criteria Name Bay High Bay Cove Georg Cham Stanli Road Road Chana Bay Lake Souni Hill Road Reef Road Bay Valley Mack Beach Colville St. M: Mud Islant Pass Strait Bay																																				
1 Pastoral landscapes	0	0	8	8	8	8	0	0	8	12	0	4	12	0	4	12	0	8	4	12	12	4	0	0	8	0	4	0	4	0	0	0	0	0		
2 Water/mountain view landscapes	3	0	6	6	3	9	9	9	0	9	0	9	9	0	9	3	3	3	9	6	9	6	3	0	6	6	9	3	3	0	3	9				
3 Prominent geographic features	6	0	3	6	6	9	6	0	0	3	3	0	3	0	3	0	9	3	0	9	9	9	0	9	0	9	3	6	3	9	0	3	9			
4 Rural development pattern	6	6	4	4	6	4	0	4	6	6	-4	4	6	6	4	4	4	6	2	6	6	2	2	6	6	6	6	6	6	6	6	6	0			
5 Diversity	2	1	2	2	2	2	2	1	1	3	3	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	3	2	1	1			
6 Landscape contrast	2	2	2	3	3	2	3	1	2	2	1	3	2	2	3	1	3	2	2	2	2	2	2	3	3	3	3	3	2	2	0	2	2			
7 Uniqueness	6	6	2	2	2	2	2	2	2	2	4	6	2	2	2	2	4	2	6	6	4	6	6	6	2	6	2	4	2	4	2	2	2			
8 Visual accessibility	2	2	2	2	3	3	3	3	3	3	1	0	3	2	2	1	3	3	3	3	3	2	2	2	2	2	2	2	1	2	2	1	3	0	1	3
9 Contributing to existing resource conservation areas	3	2	2	2	2	3	0	3	0	1	0	3	3	1	0	3	2	0	0	0	0	0	2	3	3	3	0	2	1	2	0	1	1	1		
Total weighted score	30	19	31	35	35	34	24	31	25	29	24	48	32	19	34	30	26	28	44	35	37	31	34	26	35	28	34	25	31	9	19	27				

| Natural Resource Criteria | NWI | |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 Wetlands* | Listed |
| 2 Wildlife habitat** | Listed |

* "NWI" indicates wetlands appear in the National Wetlands Inventory. ** "Listed" indicates federal or state listing of significant plant or animal species.

Resource Interpretation and Analysis

Figure 3 Landscape Units (left) and weighted significance scores, Lopez District.

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2.2 Sensitivity

Sensitivity

Landscape Types are the basic tools used for sensitivity analysis. Eleven landscape types were identified in the county based on land form and land cover characteristics (see Appendix 1.1). The sensitivity of each landscape type was evaluated to determine how capable it is of absorbing or withstanding change without detrimental effect.

Visual sensitivity was evaluated by determining whether rural residential development, the most common cause of change in the San Juan County landscape, is disruptive in the various Landscape Types found in the County. Some Landscape Types are much more capable of concealing change, such as Rolling-Forested landscapes, whereas a Flat-Open Landscape Type cannot conceal it.

As noted in Appendix 1.9, the sensitivity of wildlife habitat, wetlands and other significant natural resources must be evaluated on a resource-specific basis and are not evaluated by the open space resource sensitivity analysis.

Sensitivity of Landscape Types

The relative ability of each Landscape Type to absorb or conceal rural residential development was rated high, medium or low, as follows.

- 3 **HIGH.** Landscape Types with high sensitivity lack potential intervening elements (land forms or trees) and provide a visual plane with which structures and site manipulation will contrast (fine texture, single color, distinctive form and line). Flat-Open landscape, Low Bank-Open, High Bank-Open, Sloped-Open and Bay-of-Islands Landscape Types have high sensitivity.
Landscape Types with high contrast edges, where two unlike land forms and land cover types meet, where land forms are silhouetted against the sky, and where land meets water, have high sensitivity.
- 2 **MEDIUM.** Landscape Types with medium sensitivity have some potential for intervening elements (land forms or trees) and/or may have a more complex composition of texture, color and form which could conceal structures and site manipulation. High Bank-Forested, Sloped-Forested, and Rolling-Open Landscape Types have medium sensitivity.
- 1 **LOW.** Landscape Types with low sensitivity offer the most opportunities for concealment by land forms or trees and/or have a very complex composition of texture, color and form which conceal structures and site manipulation. Low Bank-Forested, Rolling-Forested and Flat-Forested are the least sensitive Landscape Types.

Resource Interpretation and Analysis

Sensitivity Scoring of Landscape Types

Test: How capable is the landscape of concealing single family home construction?

Sensitivity Scoring

by	Landscape Type	Contrasting Edge*
3	Low Bank-Open Bay-of-Islands High Bluff-Open Flat-Open Sloped-Open	Low Bank-Open or Flat-Open adjacent to Sloped-Forested or High Bluff-Forested (base line) Shoreline of High Bluff-Forested (base line) Silhouetted ridges of Natural Landmarks or Focal Points
2	High Bluff-Forested Sloped-Forested Rolling-Open	Flat-Open or Low Bank Open adjacent to Rolling-Forested (base line) Other shorlines (base line) Other ridges (ridge silhouette)
1	Low Bank-Forested Rolling-Forested	Any Open type adjacent to /Any Forested type Flat-Forested (base line)

* contrasting edges are junctures between contrasting Landscape Types, along base lines (such as the base of a wooded slope where it meets flat grassland), ridge silhouettes, and shorelines.

Visual accessibility

People are most sensitive to change in places which are visible to them. Open space resource sensitivity is related to visual accessibility which was determined based on the presence of main thoroughfares (main roads, scenic routes identified by the community, ferry routes and main boating channels) or public places (see: Appendix 1.7). Very high visual accessibility (3) indicates that elements could be visible from a main thoroughfare or public place. The following test and scoring was used to determine visual accessibility in the evaluation of resource sensitivity.

Test: Area is visible from a public place or thoroughfare

Scoring

- 3 Ferry route or main public road passes through or adjacent to unit from which much of the unit is visible (ie: view is not blocked by forest or development) or public place located within unit
- 2 Unit visible from (but does not contain) ferry route, public place or main public road
Main boating channel passes through or adjacent to unit from which much of the unit is visible
- 1 Unit contains a minor public road or a seldom travelled channel
- 0 No public access provided

**Resource Interpretation and
Analysis****Conclusion**

The sensitivity of each landscape type, and the visual accessibility of significant open space resources found in the county are critical factors in determining the appropriate measures and priorities for conservation. Some landscapes can accommodate great change with little apparent detrimental effect, while others can withstand very little without spoiling open space resources important to the community.

The open space resources with the highest significance scores are often also those most sensitive to change. Pastoral landscapes are usually flat and open, and some natural landmarks are sloped and open. There should be special concern for conservation when these areas are also visible from main thoroughfares or public places.

Sensitivity and visual accessibility evaluation helps identify which significant resources would be most affected if change were to occur. When combined with the analysis of the possibility of change actually happening, a priority for action can be established.

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2.3 Potential for Change

Of the several factors influencing the potential for changes to the landscape, land use regulation and conservation ownership are the only ones that can be predicted or controlled reliably. Rural residential development possible under existing ownership patterns and current land use regulations was used to determine the possibility of change (see Map Folio). Once this was assessed and mapped, the results were considered together with the significant and sensitive resources present to help form the basis for the conservation strategy. The results indicate both the urgency of taking conservation action and the actions that should be taken.

Evaluating the Potential for Change

The potential for change was evaluated on a scale of low, medium and high. A low score (0) shows very little possibility of detrimental change happening within the landscape. Only properties under a strict conservation ownership are in this category.

Areas of the county with a Comprehensive Plan density designation and/or existing land divisions allowing densities greater than ten acres per unit were given a score of medium (1). This indicates that change is possible, but because of the maximum allowable density, new construction could be located so as not to have a detrimental effect on significant and sensitive open space resources. This assumes that new land use regulations can be implemented that control the location of new construction effectively in relation to significant and sensitive open space resources. In areas with medium potential for change (1), very significant and very sensitive resources should be protected as opportunities arise.

Areas with density designations and/or existing land divisions allowing densities greater than 2 acres per unit and up to and including 10 acres per unit have a high score (2). This indicates that there is high potential for change on many parcels, within any given area, which could individually and/or cumulatively have a detrimental effect on open space resources. Within this range of densities there still may exist latitude, with adequate regulatory tools, for controlling the location of new construction to minimize adverse impacts, depending on the sensitivity of the Landscape Type and visual accessibility. In areas with this level of possibility of change, very significant and very sensitive resources need immediate and specific conservation action. Less significant and sensitive resources should be protected as opportunities arise.

Areas with density designations and/or existing land divisions of less or equal to 2 acres per unit, or with lots less than 300 feet* wide, have a very high score (3). This indicates that there is very great likelihood of change on many parcels within close proximity, which could individually and/or cumulatively have a devastating effect on open space resources.

There is little latitude within this range of densities for controlling the location of new construction to minimize impacts. Where the possibility of change is scored very high, significant resources need immediate conservation action. Very significant and very sensitive resources should be considered for acquisition, a concerted effort should be made to educate all parties involved in potential new construction, and uses in these areas should be more carefully regulated, possibly including redesignation of allowable density.

* A 300' lot width was used in addition to the two acre or smaller lot area to include long narrow lots which would allow very close spacing of structures. This close spacing would make an apparent density of 2 acres or less (2 acres = 87,120 square feet, 300 feet x 300 feet = 90,000 square feet).

Resource Interpretation and Analysis

Potential for Change

Test: Is there a potential for locating new construction without detrimental effects on open space resources within the land use regulations, ownerships, and land division patterns.

Scoring

(based on existing subdivision and Comprehensive Plan designations)

- | | | |
|---|-----------|---|
| 3 | Very high | 2 acres per unit or
< 300 foot lot width |
| 2 | High | 2+ to 10 acres per unit |
| 1 | Medium | >10 acres per unit |
| 0 | Low | Conservation ownership |

Documenting Potential for Change

These scores were mapped (see Map Folio) using the current Comprehensive Plan and a map of land division patterns prepared in 1984. A current subdivision pattern map should be prepared and maintained using a geographic information system to provide more accurate and effective information for evaluating potential for change and resource vulnerability.

The Potential for Change Map can be overlaid with the individual open space resource inventory maps or the significance summary maps to compare resource significance with potential for change.

Vulnerability Matrix and Mapping

Vulnerability is determined from the combined values for significance, sensitivity and potential for change. High vulnerability indicates that these three factors are all high and that some conservation action should be taken to protect open space resources. Lower vulnerabilities have lower priorities for action.

The Conservation Priorities Matrix (Figure 1) shows how the significance, sensitivity and potential for change values were combined to evaluate and create the Conservation Priorities map in the Map Folio. Weighted significance scores are shown at the left of the matrix. Sensitivity and visual accessibility are across the top, and possibility of change makes two columns at the very top. Four priority rankings are shown: low, medium, high, and very high.

Resource Interpretation and Analysis

Figure 1 Conservation Priorities Matrix. Significance, sensitivity and potential for change are compared to determine priority.

Conservation Priority Matrix

Significance	Weighted Score	Sensitivity	Potential for Change										
			3			2							
			High	High	Medium	Medium	Low	High	High	Medium	Medium	Low	
Pastoral Landscape	8-12												
Water/Mountain View	9												
Prominent Geographic Feature	9-12												
Edges	2-3												
Contributes to Existing Conservation Area	3												

Conservation Priority

-  Very High
-  High
-  Moderate

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Resource Interpretation and Analysis**2.4
Applying the
Process****Use of the Open Space Resource Evaluation Process**

The open space resource evaluation process described in Part I is used to establish a rating that represents relative resource quality and vulnerability. The same process used to evaluate each Landscape Unit can be used to determine acquisition priorities because the process allows comparative analysis among different parcels. This includes evaluation of their contribution to the resource quality of the Units where they occur. For parcel evaluation, the process allows identification of vulnerable resources to be conserved through site design or other appropriate conservation approaches.

This is a three-part process in which resource significance, sensitivity and potential for change are each determined and rated, with the product of those ratings representing the relative vulnerability of a unit or parcel. (Vulnerability is the term used for the composite value of resource significance and sensitivity and the potential for change to occur.)

Examples of applications of the evaluation process are provided below. The examples involve three prototypical parcels, analyzed first for acquisition priority and second for identifying appropriate site design principles.

Determining Significance

Open space resource significance is determined by applying the significance tests provided in a fold-out key in the Open Space Atlas to the parcel being evaluated. Raw scores from the tests are multiplied by the weight that represents relative resource value. The weighted scores are totalled to summarize the open space resource significance value for that parcel. Recording the score on the parcel significance worksheets documents this step of the process.

Determining Sensitivity

Resource sensitivity is tested by determining how well the Landscape Type or Types in which the resource occurs can conceal development and how accessible the resource is to public views. (Note: natural resources are tested differently, based on the particular "best management practices" for the specific resource.) As described in Appendix 2.2, sensitivity scores were assigned to the various Landscape Types that occur in the County. These scores are the second part of the equation.

Determining the Potential for Change

The third part the equation is the ranking assigned in the Map Folio based on Comprehensive Plan density designations and existing development patterns. (See Appendix 2.3)

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Significance Criteria	Unit #	12
	Landscape Unit	Hummel Lake
1 Pastoral landscapes	Weight 4 Score 0 to 20	3 12
2 Water/mountain view landscapes	Weight 3 Score 0 to 20	3 9
3 Prominent geographic features	Weight 3 Score 0 to 6	3 9
4 Rural development pattern	Weight 2 Score 0 to 20	2 4
5 Diversity	Weight 1 Score 0 to 20	1 3
6 Landscape contrast	Weight 1 Score 0 to 20	1 3
7 Uniqueness	Weight 2 Score 0 to 20	2 4
8 Visual accessibility	Weight 1 Score 0 to 20	3 3
9 Contributing to existing resource conservation areas	Weight 1 Score 0 to 20	3 3
Total weighted score	Points 57	48

Natural Resource Criteria	
1 Wetlands	NWI
2 Wildlife habitat	Listed
3 Terrestrial ecosystem	Listed

Figure 2.5 Significance scoring for Hummel Lake Landscape Unit

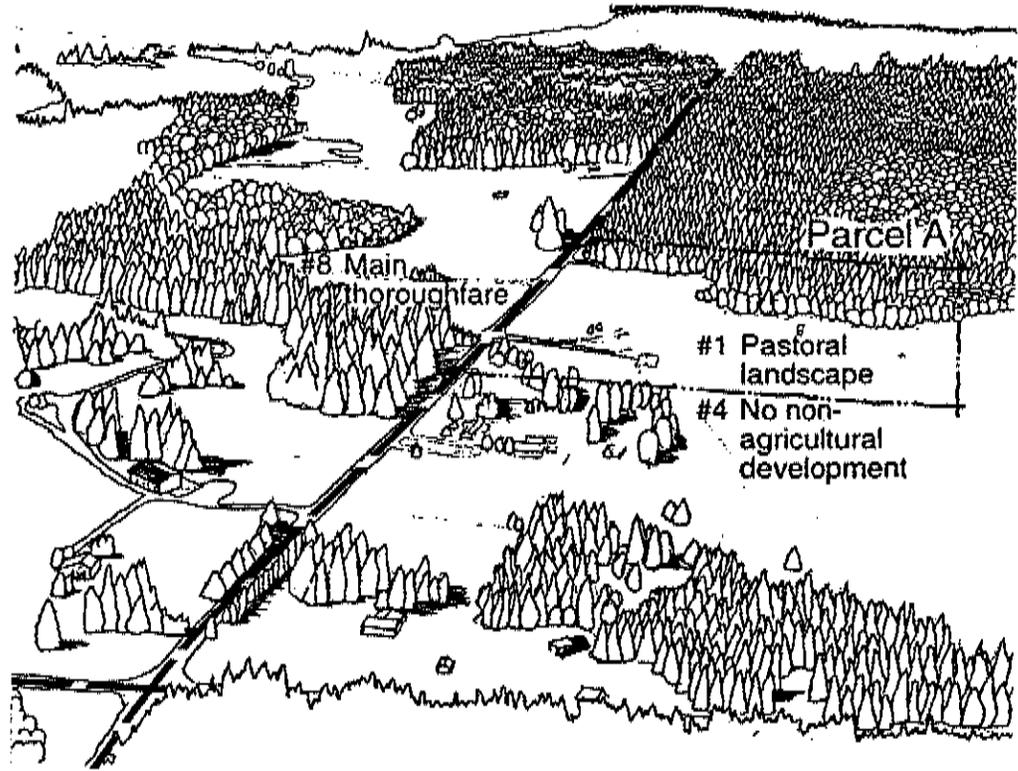


Figure 2.6 Example Parcel A, significant features. Looking west toward Lopez, Hummel Lake Landscape Unit.

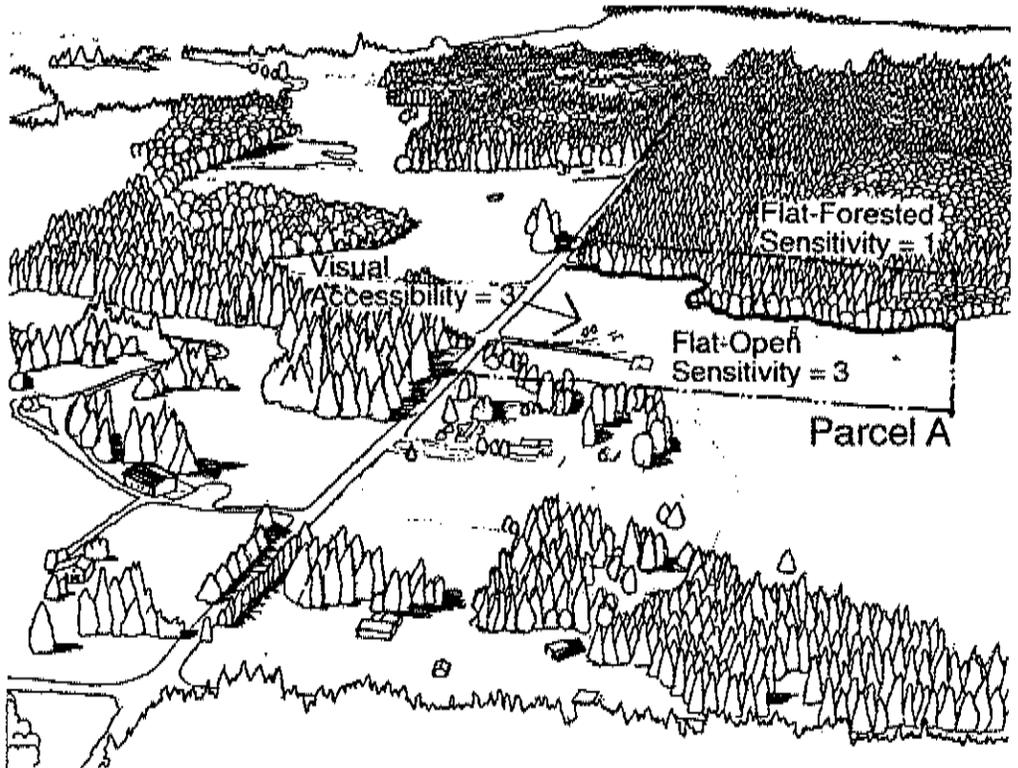


Figure 2.7 Example Parcel A, sensitivity to change.

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Example Parcel A**Characteristics of Parcel A**

Parcel A is 20 acres located in the Hummel Lake Landscape Unit on Hummel Lake Road, Lopez Island. The Open Space Atlas (Figure 2.5) and the Map Folio show the following information for the Hummel Lake Landscape Unit:

Significance

- | | (score x weight) |
|--|------------------|
| 1 Parcel A was in active agriculture in 1991 or contains prime farmland. | (Score 3x4=12) |
| 2 There are no views of open water or distant mountains from the parcel. | (Score 0x3=0) |
| 3 No prominent geographic features are visible from the parcel. | (Score 0x3=0) |
| 4 The parcel has only agricultural development. | (Score 3x2=6) |
| 5 The diversity of the landscape of the parcel is low. | (Score 1x1=1) |
| 6 Landscape contrast is relatively low, only wooded adjacent to open. | (Score 1x1=1) |
| 7 There are no unique features within the parcel. | (Score 0x1=0) |
| 8 Visual accessibility of the parcel is high since Hummel Lake Road is a main public road. | (Score 3x1=3) |
| 9 This parcel does not contribute value to an existing conservation area. | (Score 0x2=0) |
| 10 There are no wetlands within the parcel. | |
| 11 There are no protected wildlife species listed. | |
| 12 There are no protected plant species listed. | |
- The significance score for this parcel is 23.

Significance Analysis

While the Hummel Lake Unit has a very high score of 48, the parcel score is 23. The principal contribution this parcel makes to the resource value of the Unit (Figure 2.6) is its pastoral landscape (#1) with no nonagricultural development (#4), and it is visually accessible (#8).

Sensitivity (Sensitivity of the Landscape Type x Visual Accessibility)

Figure 2.7 shows Parcel A is a flat landscape, partially wooded but mostly open. The Landscape Types present are Flat-Forested and Flat-Open, with sensitivity values of 1 and 3 respectively. Visual accessibility of the parcel is 3 since it is on a main public road. The resulting sensitivity values for these landscapes are medium (1x3=3) and very high (3x3=9) respectively, indicating that the Flat-Forested portion of the site is less sensitive than the Flat-Open area.

Potential for Change

Referring to the Map Folio (Potential for Change Map) one can determine that Parcel A falls within an area where one unit per 15 acres is possible. This makes the potential for change medium (1).

Evaluation Summary	Parcel A Hummel Lake
Significance	
1 Pastoral	12
2 Water/mtn view	0
3 Geog Features	0
4 Devel Pattern	6
5 Diversity	1
6 Contrast	1
7 Uniqueness	0
8 Accessibility	3
9 Ex Conserv Areas	0
10 Wetlands	
11 Wildlife	
12 Plants	
Total Significance	sum <input type="text" value="23"/>
Sensitivity	
Landscape Type	3
Visual Accessibility	x 3
Maximum Sensitivity	<input type="text" value="9"/>
Potential for Change	<input type="text" value="1"/>

Figure 2.8 Significance, sensitivity and potential for change scoring for example Parcel A.

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Significance Criteria	Unit #	Score	Weight	Total
1 Pastoral landscapes	4	3	12	36
2 Water/mountain view landscapes	3	1	9	9
3 Prominent geographic features	3	3	12	36
4 Rural development pattern	2	3	6	18
5 Diversity	1	2	2	4
6 Landscape contrast	1	3	3	3
7 Uniqueness	2	3	6	12
8 Visual accessibility	1	3	3	3
9 Contributing to existing resource conservation areas	1	3	3	3
Total weighted score	47			

Natural Resource Criteria	Score
1 Wetlands	NWI
2 Wildlife habitat	
3 Terrestrial ecosystem	

Figure 2.9 Significance scoring for Crow Valley Landscape Unit

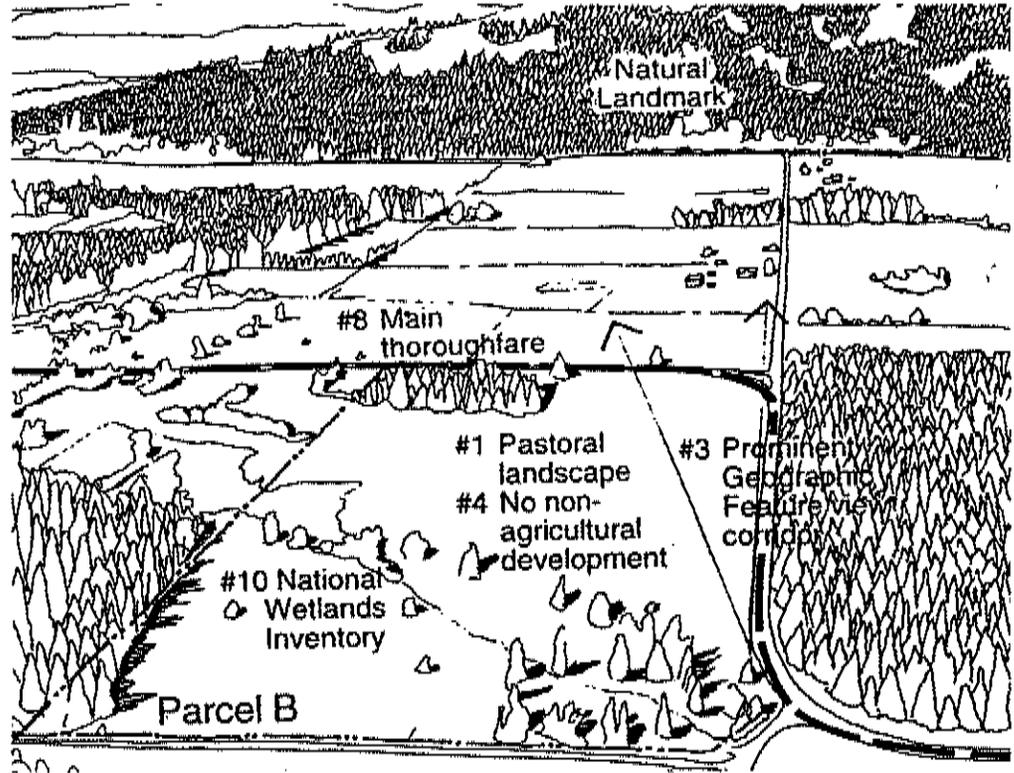


Figure 2.10 Example Parcel B, significant features. Looking west toward Turtleback Mountain, Crow Valley Landscape Unit.

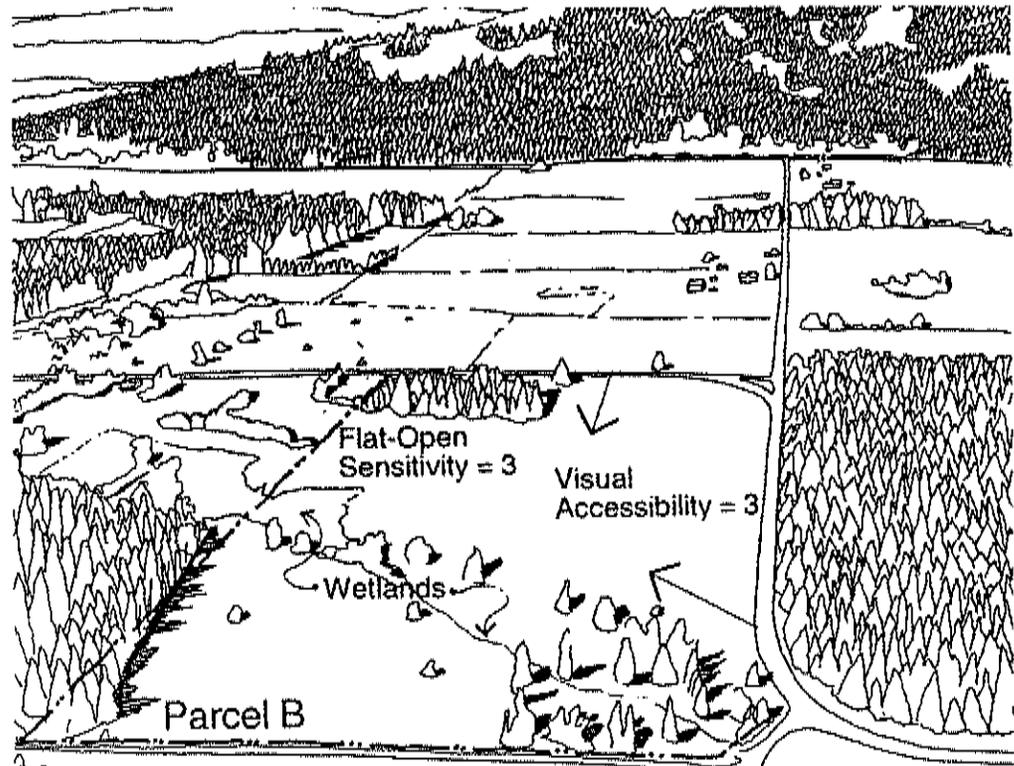


Figure 2.11 Example Parcel B, sensitivity to change.

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Example Parcel B**Characteristics of Parcel B**

Parcel B is 40 acres located in the Crow Valley Landscape Unit on the Horseshoe Highway on Orcas Island. The Open Space Atlas (Figure 2.9) and the Map Folio show the following information:

Significance**(score x weight)**

- 1 Parcel B was in active agriculture in 1991 or contains prime farmland. (Score 3x4=12)
- 2 There are no views of water or distant mountains from the parcel. (Score 0x3=0)
- 3 The property is in the foreground and view corridor of Turtleback Mountain, a prominent geographic feature. (Score 3x3=9)
- 4 The parcel has only agricultural development. (Score 3x2=6)
- 5 The diversity of the landscape of the parcel is low. (Score 1x1=1)
- 6 Landscape contrast is low, only wooded adjacent to open. (Score 1x1=1)
- 7 There are no unique features within the parcel. (Score 0x1=0)
- 8 Visual accessibility of the parcel is high since the Horseshoe Highway is a main public road. (Score 3x1=3)
- 9 This parcel contributes to an existing conservation area. (Score 0x1=0)
- 10 There are wetlands mapped in the unit, and checking the map folio shows wetlands within the parcel at the south east corner.
- 11 There are no protected wildlife species listed.
- 12 There are no protected plant species listed.

The significance score for this parcel is 32.

Significance Analysis

The Crow Valley Unit has a very high score of 47, and parcel B scores 32. This parcel contributes several values to the overall significance of the Unit (Figure 2.10): the pastoral landscape (#1), it is the foreground of a prominent geographic feature (#3), there is no nonagricultural development (#4), it is visually accessible (#8), and there are wetlands mapped (#10).

Sensitivity (Sensitivity of the Landscape Type x Visual Accessibility)

Figure 2.11 shows Parcel B is a Flat-Open Landscape Type, which can include some woodlots and hedgerows. Flat-Open Landscape Types have a sensitivity value of 3. Visual accessibility of the parcel is 3 since it is on a main public road. The sensitivity value for this parcel is very high (3x3=9), indicating that the site is very sensitive to change. The wetlands should be surveyed to determine its particular sensitivities.

Potential for Change

Referring to the Map Folio (Potential for Change Map) one can determine that Parcel B falls within an area where one unit per 5 acres is possible. This makes the potential for change high (2).

Evaluation Summary	Parcel B Crow Valley
Significance	
1 Pastoral	12
2 Water/mtn view	0
3 Geog Features	9
4 Devel Pattern	6
5 Diversity	1
6 Contrast	1
7 Uniqueness	0
8 Accessibility	3
9 Ex Consv Areas	0
10 Wetlands	NWI
11 Wildlife	
12 Plants	
Total Significance	sum <input type="text" value="32"/>
Sensitivity	
Landscape Type	3
Visual Accessibility	x 3
Maximum Sensitivity	<input type="text" value="9"/>
Potential for Change	<input type="text" value="2"/>

Figure 2.12 Significance, sensitivity and potential for change scoring for example Parcel B.

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Significance Criteria	Unit #	Score	Weight	Score (S to W)	Total
1 Pastoral landscapes	1	2	4	8	8
2 Water/mountain view landscapes	1	3	3	9	9
3 Prominent geographic features	1	1	3	3	3
4 Rural development pattern	1	1	2	2	2
5 Diversity	1	3	1	3	3
6 Landscape contrast	1	3	1	3	3
7 Uniqueness	1	3	2	6	6
8 Visual accessibility	1	2	1	2	2
9 Contributing to existing resource conservation areas	1	2	1	2	2
Total weighted score	Possible S/W	38			

Natural Resource Criteria	Score
1 Wetlands	NWI
2 Wildlife habitat	
3 Terrestrial ecosystem	

Figure 2.13 Significance scoring for Doe Bay Landscape Unit

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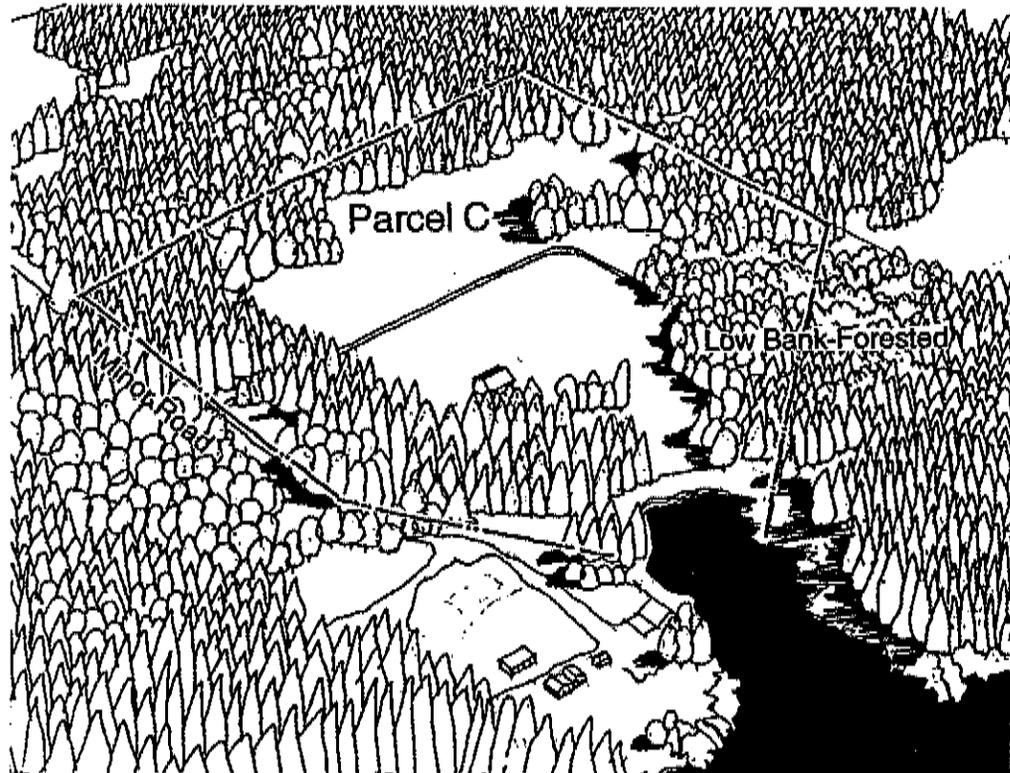


Figure 2.14 Example Parcel C, significant features. Looking north over Doe Bay, Doe Bay Landscape Unit.

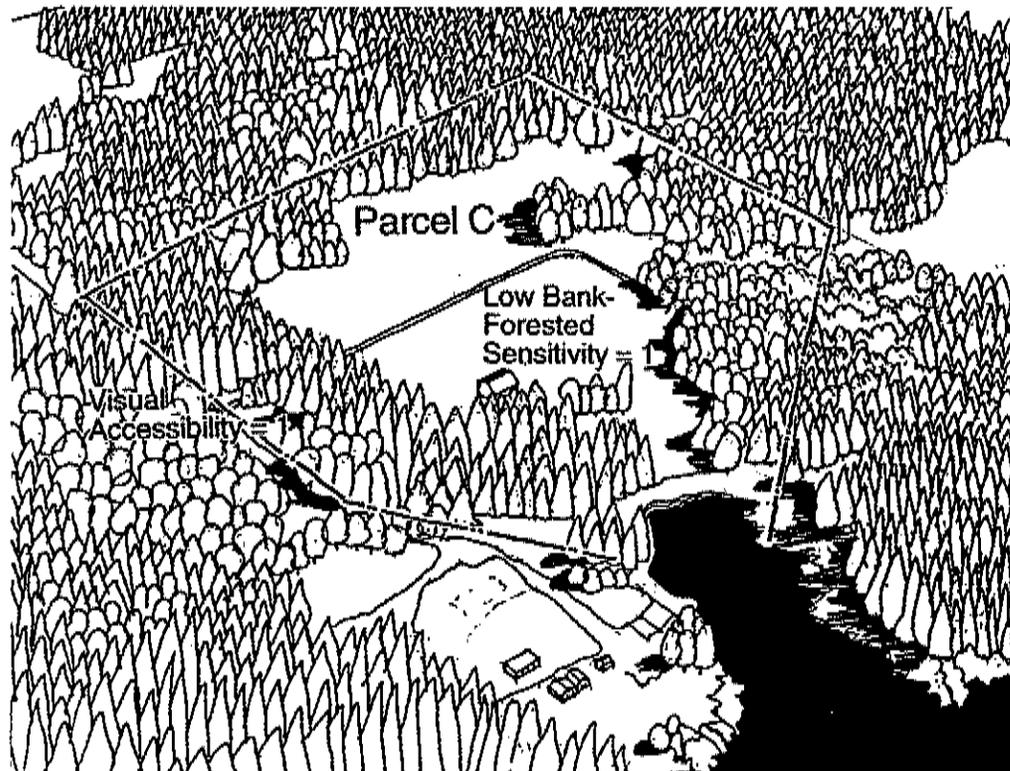


Figure 2.15 Example Parcel C, sensitivity to change.

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Example Parcel C

Characteristics of Parcel C

Parcel C is 20 acres located in the Doe Bay Landscape Unit on Orcas Island. The Open Space Atlas (Figure 2.13) and the Map Folio show the following information:

Significance	(score x weight)
1 Parcel C has a major clearing within a Low Bank-Forested landscape type.	(Score 1x4=4)
2 There are views of water or distant mountains from the parcel but it is not publicly accessible.	(Score 1x3=3)
3 The property does border on Doe Bay, a minor geographic feature.	(Score 1x3=3)
4 Resort and housing development is evident in the Unit, but screened from view from the parcel.	(Score 2x2=4)
5 The diversity of the landscape of the parcel is low.	(Score 1x1=1)
6 Landscape contrast of the parcel includes a shoreline area.	(Score 2x1=2)
7 There are no unique features within the parcel.	(Score 0x1=0)
8 Visual accessibility of the parcel is low since the Doe Bay Road is not a main public road and Doe Bay is not a main boating channel.	(Score 1x1=1)
9 This parcel does not contribute value to an existing conservation area.	(Score 0x1=0)
10 There are no wetlands within the parcel.	
11 There are no protected wildlife species within the parcel.	
12 There are no protected plant species within the parcel.	

The significance score for this parcel is 18.

Significance Analysis

The Doe Bay Unit has a score of 38, and parcel C scores 18. This parcel is typical of the character of the Unit with no outstanding significance scores.

Sensitivity (Sensitivity of the Landscape Type x Visual Accessibility)

Figure 2.15 shows Parcel C is within a Low Bank-Forested Landscape Type, which can include clearings. Low Bank-Forested Landscape Types have a sensitivity value of 1. Visual accessibility of the parcel is 1 since it is not on a main public road, and the bay is not heavily travelled. The sensitivity value for this parcel low (1x1=1) indicating that the site is not particularly sensitive to change.

Potential for Change

Referring to the Map Folio (Potential for Change Map), one can determine that Parcel C falls within an area where one unit per 2 acres is possible. This makes the potential for change very high (3).

Evaluation Summary	Parcel C Doe Bay
Significance	
1 Pastoral	4
2 Water/mtn view	3
3 Geog Features	3
4 Devel Pattern	4
5 Diversity	1
6 Contrast	2
7 Uniqueness	0
8 Accessibility	1
9 Ex Conserv Areas	0
10 Wetlands	
11 Wildlife	
12 Plants	
Total Significance	sum <input type="text" value="18"/>
Sensitivity	
Landscape Type	1
Visual Accessibility	x 1
Maximum Sensitivity	<input type="text" value="1"/>
Potential for Change	<input type="text" value="3"/>

Figure 2.16 Significance, sensitivity and potential for change scoring for example Parcel C.

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Comparison for Determining Acquisition Priority

Acquisition priority is determined based on comparison of the vulnerability values resulting from the three-part analysis described above. Figure 2.17 shows the vulnerability of the three parcels.

Parcels A and B have similar characteristics in terms of sensitivity and visual accessibility. However, Parcel A has a lower potential for change and Parcel B has a higher significance score because of its relationship to the view of Turtleback Mountain. The total vulnerability score (significance x sensitivity x potential for change) for Parcel A is 207 and Parcel B is 576. B is therefore higher in priority for acquisition.

The significance and sensitivity scores of Parcel B indicate that acquisition should be pursued to maintain the pastoral landscape character, prevent non-agricultural development in the view corridor of Turtleback Mountain, and to protect the wetlands found on the site. In this case, a scenic easement could be useful, which prevents building in the areas adjacent to the road but allowed it in the southwest portion of the property, especially if screening could be arranged.

Parcel C has no remarkable significance scores and is not particularly sensitive because of limited visual accessibility. The potential for change is high, but the overall vulnerability of the site is lower than for parcels A & B.

If, however, the landscape type and visual accessibility of Parcel C was made higher by clearing and removing shoreline vegetation which screens the view from the National Historic Site at Doe Bay, the vulnerability score of the parcel would rise above Parcel A (Figure 2.18), indicating that acquisition of an easement preserving the shoreline vegetation might be desirable.

Where significant natural resources are found such as wetlands, or protected plants or animals, the sensitivity of that specific species and site should be evaluated for acquisition suitability.

Figure 2.17 Vulnerability comparison for example parcels A, B, and C.

Evaluation Summary			
	Parcel A	B	C
Significance			
1 Pastoral	12	12	4
2 Water/mtn view	0	0	3
3 Geog Features	0	9	3
4 Devel Pattern	6	6	4
5 Diversity	1	1	1
6 Contrast	1	1	2
7 Uniqueness	0	0	0
8 Accessibility	3	3	1
9 Ex Conserv Areas	0	0	0
10 Wetlands			NWI
11 Wildlife			
12 Plants			
Total Significance	sum	23	32
Sensitivity			
Landscape Type		3	3
Visual Accessibility	x	3	3
Maximum Sensitivity		9	9
Potential for Change			
		1	2
Total Vulnerability		207	576

(signif x sens x change = vulnerability)

Evaluation Summary		
	Parcel C	alt
	Doe Bay	C
Significance		
1 Pastoral	4	4
2 Water/mtn view	3	3
3 Geog Features	3	3
4 Devel Pattern	4	4
5 Diversity	1	1
6 Contrast	2	2
7 Uniqueness	0	0
8 Accessibility	1	1
9 Ex Conserv Areas	0	0
10 Wetlands		
11 Wildlife		
12 Plants		
Total Significance	sum	18
Sensitivity		
Landscape Type	1	3
Visual Accessibility	x	1
Maximum Sensitivity	1	9
Potential for Change		
	3	3
Total Vulnerability	54	486

(signif x sens x change = vulnerability)

Figure 2.18 Vulnerability comparison for example parcel C if screening vegetation is removed.

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Analysis for Site Design Purposes

The significance scoring of Parcel B indicates that the pastoral landscape and the view corridor to Turtleback Mountain are important features of the parcel and the Unit. The Flat-Open Landscape Type is very sensitive to change and portions of the parcel most visible from the road are particularly sensitive. Site design review policies should limit new development to the portion of the site away from the road, maintaining all native vegetation. New vegetation should be required as screening.

Wetland portions of the site should also be protected through accurate identification and grading and construction setbacks.

The significance scoring of Parcel C indicates that the pastoral landscape is a minor feature of the parcel and the Unit. The Flat-Forested Landscape Type is not very sensitive to change and the parcel is not visually accessible. Site design review policies should limit removal of vegetation which would expose new development to the National Historic Site at Doe Bay Resort. Good design practice might include location of the access road behind the homes to provide a common open area overlooking the bay.

Design Scenarios

Figures 2.19 and 2.21 illustrate the site design review policies advocated by the Plan using example parcels B and C. Figures 2.20 and 2.22 illustrate the potential development pattern under the existing regulations.

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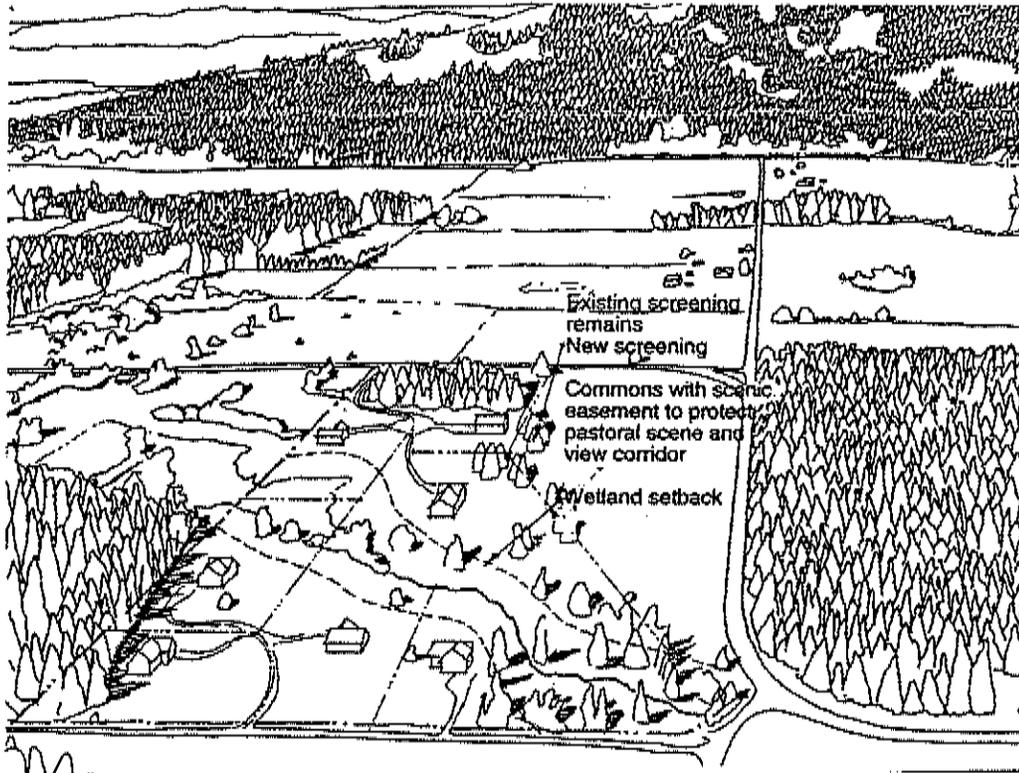


Figure 2.19 Site planning principles which conserve open space resources. Existing vegetation is protected where it screens development from view from the road. Additional trees are planted to improve screening. Development is away from the view corridor and pastoral areas visible from the road. Buildings and grading operations are set back from the wetlands.

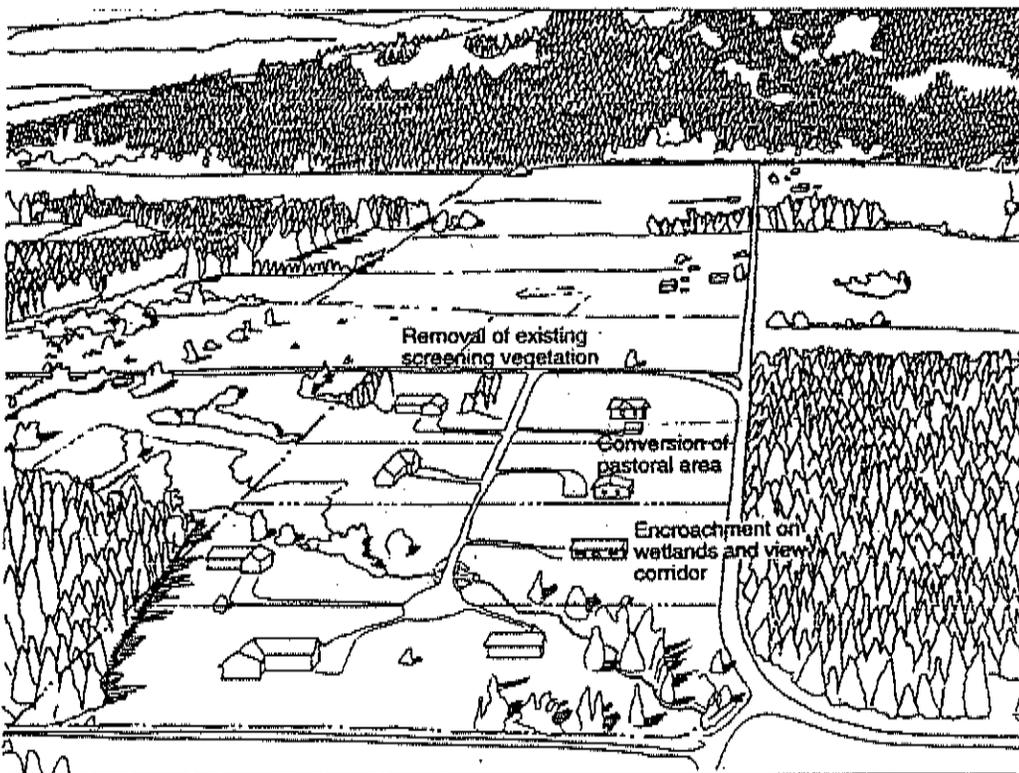


Figure 2.20 Potential development pattern under existing regulations. R5 designation could allow up to 8 units in this 40 acre parcel. Conventional development might cause encroachment on wetlands and the view corridor to Turtleback Mountain, as well as converting the pastoral scene adjacent to the road into rural residential yards.

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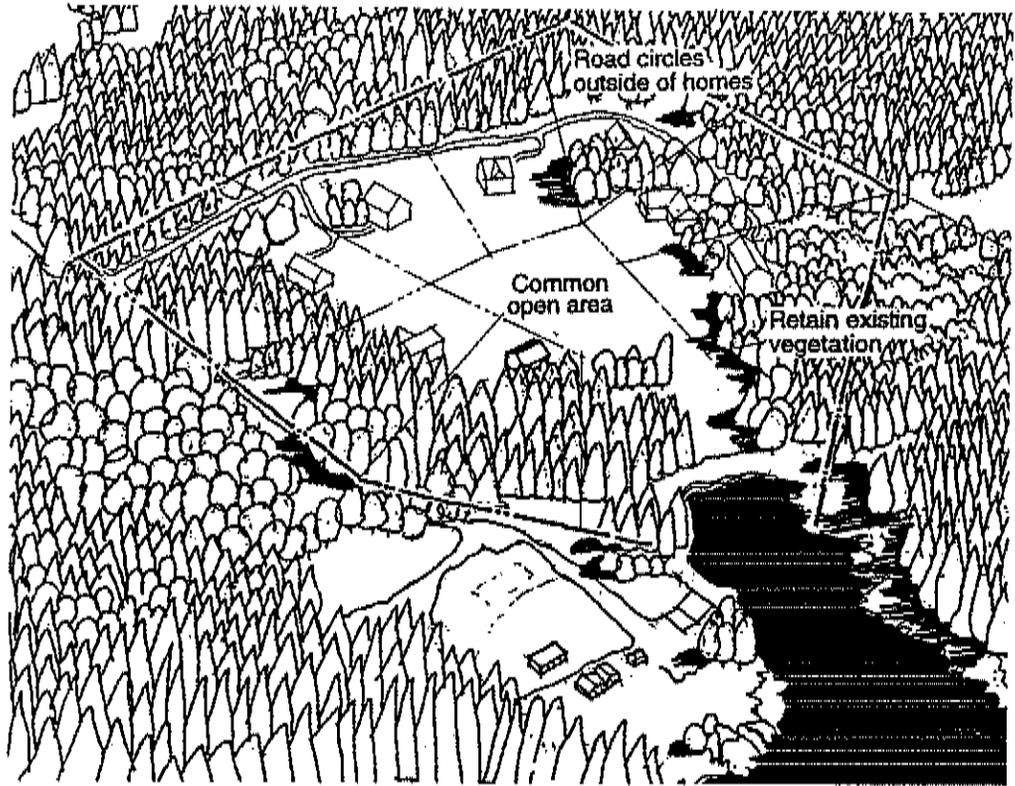


Figure 2.21 Site planning principles which conserve open space resources. Existing vegetation is protected where it screens development from view from the National Historic Site at Doe Bay Resort. Existing vegetation is retained and the road circles behind the homes providing a common area open to the bay.

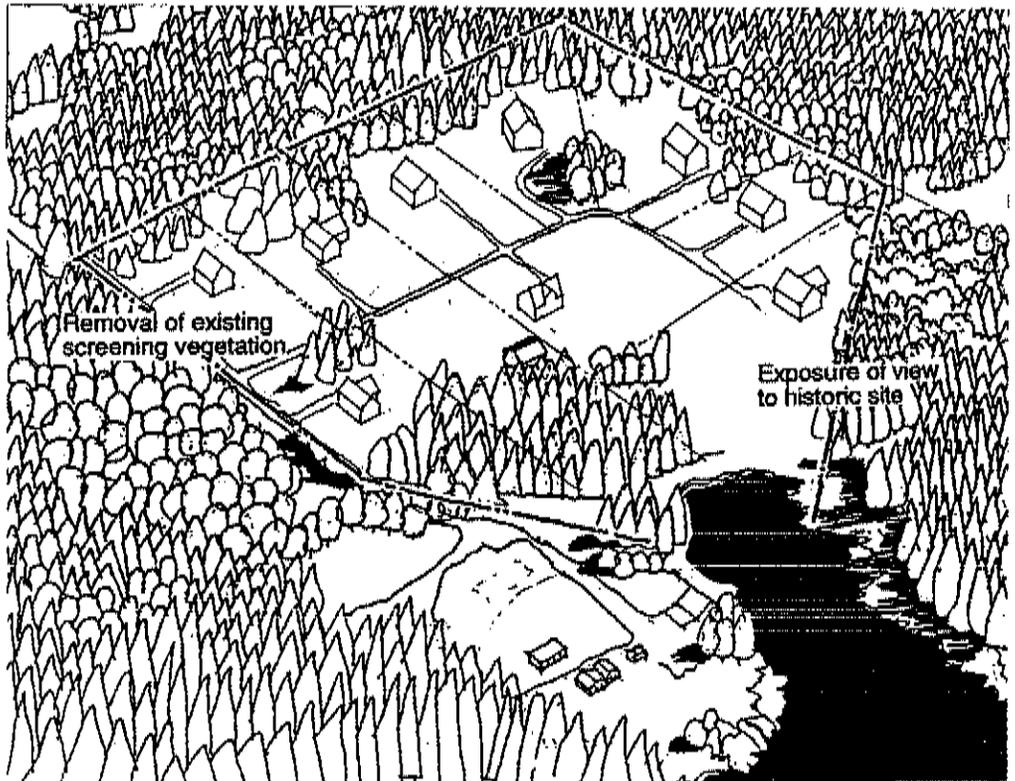


Figure 2.22 Potential development pattern under existing regulations. S designation could allow up to 10 units in this 20 acre parcel. Conventional development might cause removal of trees screening view

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3.0 Regulation for Conservation of Open Space Resources

3.1 Evaluation of Existing Regulations

A

Alternatives for Protecting Open Space Through New and Amended Plans and Ordinances

This supplements and details the findings and recommendations on regulation contained in the Open Space and Conservation Plan. It includes results of the evaluation of existing plans and regulations for conservation and provides the rationale for specific recommendations regarding amendments and new ordinance adoption.

Comprehensive Land Use Plan and Regulations

Background

The San Juan County Comprehensive Land Use Plan and Regulations ("Comprehensive Plan") is based on the performance standard system of regulation, which allows a wide variety of land uses throughout the County, provided that certain performance criteria or regulations are met. The non-shoreline areas of the County are mapped according to six land use designations, such as "Urban" or "Natural." These are intended to reflect the existing character of a geographic area and the types and levels of activity that are consistent with the existing character and qualities of the area. The "Rural," "Rural-Timber/Agriculture," "Conservancy," and "Natural" land use designations are generally recognized in the Comprehensive Plan as areas to be protected from more varied and intensive uses.

Evaluation

Each use or activity described in the Comprehensive Plan must comply with general policies and regulations that are based on the land use designations. Most of the regulations are akin to performance criteria. More traditional development standards, such as specific setbacks, lot coverage or height limits often found in a zoning code, are all but absent from the regulations. An exception is a residential density limitation.

Densities allowed by the Comprehensive Plan are specified only as maximums, with the County delegated the authority to impose a lower average density. However, the legal basis for reducing density is not spelled out clearly.

In addition to regulations, some uses or activities also require a special review process, such as site plan review or conditional use permit, to determine the appropriateness and consistency with the intent, purpose and regulations in the Comprehensive Plan. Both individual single-family house construction and grading up to 150 cubic yards are exempt from all of these processes.

Many of the goals, regulations (or performance criteria), and special review processes established in the Plan recognize the importance of open space resources in that they make general reference to the need to protect natural and scenic resources, preserve rural character, and assure the compatibility of the proposed use or activity with existing development patterns. However, the implementation of these goals and regulations is sometimes compromised by the lack of explicit language that would assist the decisionmaker in identifying the various open space resources, provide a clear and legally defensible open space policy basis for conditioning or denying proposals, and provide a

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mechanism and criteria by which proposals can be conditioned (or denied) in order to conserve open space resources.

These problems exist for all of the open space resources. However, they are most evident with respect to those resources that are more accurately described as qualities (as opposed to specific physical elements) or that are recognized more for their aesthetic value, rather than any inherent contribution to environmental processes. For instance, the Comprehensive Plan seeks to "protect and maintain the natural beauty and resources of the islands, maintain the present rural, residential, agricultural atmosphere, respect the natural environment and processes," and "encourage the preservation of scenic and nonrenewable natural resources." (See Comprehensive Plan Section 16.44.040A and G) However, nowhere does the Comprehensive Plan identify those elements or open space resources, such as view corridors, pastoral settings and ridge lines, that contribute to the natural beauty, rural agricultural atmosphere or scenic resources of the islands.

In addition, regulations and decision criteria which could be used to protect and conserve such open space resources or qualities are similarly vague, provide unnecessary loopholes, or are not directly related to the conservation of the resource. As an example, a commercial use can be permitted in a Rural designation as a conditional use only if, among other things, the use meets the intent and purpose of the Rural designation to limit "development to the types of uses which will not destroy or degrade the [rural, undeveloped] atmosphere" of the area. (See Comprehensive Plan Section 16.44.050.C) While this statement provides a generalized description of intent, it does little to assist the decisionmaker in determining what factors contribute to the "atmosphere" and to what extent each should be protected.

Some regulations are more specific and offer the potential to conserve open space resources, such as large areas of pasture land, scenic views, or roadside timber stands, but include unnecessary language which weakens the regulations. For instance: residential subdivision is subject to general design controls "to preserve and protect special resources including but not limited to agricultural and timber land,...and scenic views from public roadways, **unless the applicant demonstrates that it is impracticable to do so**"; commercial uses which are permitted as a conditional use in the Rural and Rural-Timber/Agriculture designations are "limited to commercial development directly related to forest management or agricultural activity, **and other low intensity, low impact uses and activities**"; and, commercial uses proposed for Rural and Rural-Timber/Agriculture designations must, "when possible,...be screened from view from public roads and neighboring properties." (See Comprehensive Plan Sections 16.44.140.A.12, 16.44.080.B.3 and 16.44.080.B.3.e. Emphasis added.) No definitions of "impracticable" or "possible" are provided, resulting in some ambiguity. For example, it is unclear to what extent individual financial circumstances of the applicant can affect application of these standards.

Finally, other regulations would be more effective if tied directly to open space resource conservation. Buffers required for commercial uses in Rural and Rural-Timber/Agriculture designations to "maintain visual separation from other land uses and to contain any adverse impacts" could also be required to conserve identified and defined open space resources. The presence of open space resources, such as view corridors or pasture land, could be cited as a "specific site consideration" which would "dictate a lower density than that shown on the official map" for residential uses. (See Comprehensive Plan Sections 16.44.080.B.3.g. and 16.44.140.A.10.)

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Unlike open space resources or qualities that are primarily recognized for their aesthetic value, the Comprehensive Plan does attempt to identify a few of the physical open space resource elements, such as wetlands, that are commonly recognized as critical to environmental quality or natural processes. Such resources are, by their very nature, more tangible and have definable boundaries, and thus are more easily described, mapped, regulated, and ultimately, protected, when compared to other, qualitative resources such as rural, agricultural character. However, the Comprehensive Plan definitions, policies and regulations relating to these elements are similarly general, and omit or do not incorporate by reference those physical open space elements, such as wetlands, wildlife habitats or watershed areas, that have been mapped and clearly identified and described by the County in other study documents, including the Watershed Ranking Report.

Findings:

1) Modification of the existing Comprehensive Plan is critical to the successful conservation of open space resources through regulation because it establishes the policy basis and development requirements for non-shoreline land uses and activities throughout the County. It also provides the authority to adopt additional regulatory tools not presently used by the County.

2) All open space resources, including those high in aesthetic value but not critical to the conservation of natural resources, can be conserved through the Comprehensive Plan because its authority can extend beyond its present focus.

3) Inventories can reduce ambiguity and inform the public, property owners and decisionmakers of the existence of open space resources. However, some resources do not lend themselves to mapping or inventory practices, the County may not have the funding or staff to inventory all resources, and some resource areas inevitably get overlooked in the inventory or mapping process. Therefore, it is important that descriptive definitions be developed with as much specificity as possible to assist in identifying and regulating a resource, and that such descriptive definitions should accompany any mapping or inventory incorporated into the regulations.

4) New and amended Comprehensive Plan policies should address the importance of open space resources, their vulnerability, and the need to protect them.

5) The existence of County-identified open space resources on a development site should be cited in the Plan as a "special site consideration" which allows for a reduction in average residential density unless site design can conserve the resource, or direct that common areas required for subdivision development include open space resources present on the property.

6) Specific development standards should be adopted where the effects can be predetermined. For example, regulations could be amended to prohibit alteration or development in a wetland mapped by the County (or by the applicant and accepted by the County) so long as a taking does not occur. The County could opt to establish minimum building setbacks or buffers to minimize encroachment into the protected area (Section 16.44.060). Other examples include standard minimum setbacks along scenic routes (if these can be determined) or height limitations on properties designated as constituting a pastoral landscape in which a low profile may be desired to preserve the character of that resource.

7) Performance standards should be applied where effects of specific development

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standards cannot be anticipated. As an example, specific setbacks or height restrictions that may be necessary to conserve designated view corridors are best determined on a case-by-case basis, rather than through blanket requirements or dimensions that cannot anticipate individual circumstances. However, the General Regulations Section of the Comprehensive Plan could be amended to preclude (absent a variance) the obstruction of County-designated view corridors by any use, development or alteration of the land (Section 16.44.060). In addition to this standard, the County could establish requirements for mapping the view corridor which would ultimately provide the basis for determining specific height restrictions and/or setbacks necessary to conserve the designated view.

8) Decision criteria should be amended to ensure that special qualities of the various types of open space resources are recognized and preserved through the conditional use permit and site plan review processes. For instance, the Comprehensive Plan identifies specific criteria for approving a commercial use in a Rural designation. Several criteria require screening and buffering to reduce visual impacts of proposed commercial use and its associated parking. Although screening devices, such as fences, walls, berms and substantial landscaping, could be used to satisfy the criteria for commercial development in a Rural area they could also defeat the intent of an open space resource designation that may also apply to the property. As an example, the construction of a fence across a berm along the front of a chimerical building may shield it from adjacent uses and the public road, but could also detract from the character of a designated pastoral landscape. A criterion requiring protection of the qualities and characteristics of mapped open space resources could ensure that another solution was sought consistent with the adopted open space conservation policies.

9) A Conservation Overlay District Ordinance should be adopted as a subarea plan. This should establish a new site design review process, which would include general criteria as well as criteria or guidelines specific to certain types of resources, and a new appeals body would be established. The Comprehensive Plan states that overlay district plans supersede conflicting provisions in the Plan, so only minimal amendments to the Plan itself will be required to add reference to the Conservation Overlay District.

10) A Clearing and Grading Ordinance should be developed to allow County conditioning of forest practices permits which are now considered Class II or III and exempt from local authority, and to require concurrent actions on clearing and development applications, to supplement Comprehensive Plan policies and help to implement the Open Space and Conservation Plan. It should also identify standards for grading to protect open space resources.

Recommendations:

1) **Definitions and Mapping.** Include descriptive definitions of open space resources that are to be protected by defining them outright and/or incorporating them into the Comprehensive Plan by reference to a County-adopted open space resource document. General mapping (not to be confused with specific boundary mapping that would be required as part of a development application) or a detailed inventory should be considered in addition to descriptive definitions where possible and appropriate.

2) **Amend Goals and Policies.** Strengthen the policy basis for decisionmaking by expanding the goals and policies section of the Comprehensive Plan (Section 16.44.040) to include goals and policies specific to open space conservation. These should address,

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among other things, the importance of open space resources (as defined in the Comprehensive Plan), resource vulnerability to land alteration and/or development, and the need to protect open space resources. Policy sections that should be amended include the General, Conservation, Taxation, and Land Development Policies (as recommended below), and might also include Access to Public Lands and Facilities, Recreation, and Historic and Cultural Preservation.

16.44.040, A - General

5. Recognize that the maximum allowable density applied to land by designation on the official map reflects the general intent of this plan for residential development and should be allowed unless maximum density would exceed site capabilities or unless it would thwart other applicable County land use regulations. *For purposes of this Plan, the following site capabilities or conditions which may dictate a density lower than the specified maximum include but are not limited to:*

- a. *Soil suitability to sustain individual or community onsite sewage disposal systems;*
- b. *Water supplies of a quality and quantity necessary to serve the proposed development;*
- c. *The presence of significant open space resources as defined in this Plan which will be adversely and unavoidably affected by development at maximum density with or without clustering of building sites; and*
- d. *Environmentally sensitive areas or features as defined in this Plan or as designated by county ordinance which would either be harmed or which would result in hazards to life or property as a result of development at maximum density.*

Building sites should be clustered or grouped and roads and utilities should be arranged in a manner to maintain the quality of environmentally sensitive areas and/or open space resources where they occur.

6. *Recognize and protect natural and visual open space resources identified in an adopted Conservation Overlay District or Environmentally Sensitive Areas District in all land use and development actions subject to this Plan.*

16.44.040, G - Conservation

6. *Protect those visual open space resources which contribute significantly to the rural character and natural beauty of San Juan County.*

16.44.040, J - Taxation

Goal: To encourage a system of taxation which will be compatible with sound environmental land use planning.... *Toward this goal, the county should support efforts to amend state legislation to allow transfers of property between different current use taxation programs without incurring liability for the owner for statutory penalties and back taxes.*

16.44.040, L - Land Development

Goal: To most fully recognize the goals of this Plan and the capabilities and limitations of the land, the County encourages property owners to husband their entire parcels so that over time development can be managed without piecemeal platting.... *This Plan should foster site planning and design which conserves significant and sensitive open space resources by providing specific guidance for land use and development in an adopted Conservation Overlay District or Environmentally Sensitive Areas District*

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ordinance. In addition, the county should enlist the aid of community and professional organizations to sponsor public education programs on open space resources, resource values, and conservation techniques.

3) (a) **Reduce Ambiguity.** Fine-tune the existing regulations and criteria to provide better direction to decisionmakers about how to conserve open space resources. This will not substantially change the basic regulations, tools or process now available in the Comprehensive Plan, but will increase their effectiveness by reducing ambiguity, eliminating unnecessary loopholes, and specifically relating open space resource conservation to certain regulations.

3) (b) **Adopt New Conservation Regulations.** Expand the existing Comprehensive Plan to include new regulations and criteria developed specifically for open space resource conservation. This will work within the existing format but provide substantially more specific regulations for conservation of open space resources than in 3)(a). Typical components could include (but would not be limited to) the following:

- **Specific development standards** to protect open space resources, such as height restrictions, buffers and setbacks, where such requirements can be predetermined.
- **Performance-based development standards** where specific requirements or dimensions cannot be anticipated.
- **Decision criteria** in the site plan review and/or conditional use permit processes that provide for open space resource conservation.

4) **Expand Use of Review Processes.** Modify the Comprehensive Plan to expand the scope of its existing review processes (site plan review and/or conditional use permit) to include more activities and uses if they are proposed for development within significant open space resource areas. This could include individual house construction and grading to assure that such activities and uses would be guided by adopted open space policies and regulations.

5) **Adopt a Conservation Overlay District.** Develop a new Conservation Overlay District that establishes definitions, policies, regulations, review criteria and scope akin to those described above, but that incorporates them into the Comprehensive Plan as a subarea plan (Section 16.44.170).

6) **Adopt a Clearing and Grading Ordinance.** Develop an agreement with the Department of Natural Resources to authorize county review authority for forest practices permits based on land use designations and development patterns which are not indicative of ongoing forestry use. Develop an ordinance to specify standards for land clearing and grading in specific open space resource areas.

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**Regulation for Conservation
of Open Space Resources****SEPA Implementing Ordinance -
Environmentally Sensitive Areas****Background**

The State Environmental Policy Act is an overlay on other laws of the state and local jurisdictions. The purpose of SEPA is to require decisionmakers to take a "hard look" at environmental consequences, alternatives, and mitigation measures before making a decision on actions that are subject to SEPA review. Decisionmakers are entitled to perform studies pursuant to SEPA and to use the results to impose conditions or decide not to approve a project. Elements of the environment that are reviewed for environmental impact and that are particularly relevant to open space conservation include surface water, plant and animal habitat, unique plant and animal species, fish and wildlife migration routes, scenic resources, land and shoreline use, aesthetics, historic and cultural preservation, and agricultural crops.

SEPA Policies

The law requires that substantive SEPA decisions, that is, decisions to condition or deny a project based on SEPA, must be based on policies adopted by the jurisdiction for that specific purpose. This means the local jurisdiction must have a catalog of SEPA policies which it can point to when it examines the environmental consequences of a project pursuant to SEPA and then decides to condition or deny the project. For example, you can't tell someone to keep a house out of a wetland using SEPA authority alone unless you have an adopted policy that says construction should not occur in wetlands.

Some development proposals or actions, including single-family house construction and grading of less than 150 cubic yards, are categorically exempt from the environmental impact review requirements of SEPA. State law establishes exempt levels which can be raised, but not lowered, by the local jurisdiction for certain activities. The state-established exempt level for residential construction is four or fewer dwelling units; the County could raise this, is supported by local conditions, to 20 units. (The County SEPA ordinance, Section 16.24, lists the four unit exemption.)

Environmentally Sensitive Areas

There are two exceptions to the exempt levels which are relevant to open space conservation. All new construction (except the installation of hydrological measuring devices and survey markers) located wholly or partly on lands covered by water is subject to SEPA. Also, the County can specify by ordinance that certain categorical exemptions for some forms of development do not apply, so that they are subject to SEPA if undertaken within a designated and mapped "environmentally sensitive area." For example, the County could require that all new construction or grading that occurs in an environmentally sensitive area is subject to SEPA review and conditioning authority.

Environmentally sensitive areas are defined in SEPA as areas within which minor new construction and other categorically exempt activities could have a significant impact on the elements of the environment. Examples include areas with unstable soils, steep slopes, unusual plants or animals, wetlands, and areas subject to flooding.

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Evaluation

SEPA policies and environmentally sensitive area designations are two important components of SEPA the County can use for open space resource conservation. However, the County has not used these opportunities.

San Juan County does not have any policies that were developed and adopted specifically for the purpose of implementing SEPA. Instead, the County SEPA ordinance incorporates the policies from other documents as its basis for SEPA authority. Of these, only the Comprehensive Plan and Shoreline Master Program have policies that could be used to mitigate impacts on open space resources. (The Land Division Ordinance has "plat design standards" that actually read more like general policies.) Most of these policies, however, are too vague or general to provide clear direction for mitigation, do not address certain critical open space resources, or, in the case of the Shoreline Master Program, are applicable only to shoreline areas.

Although SEPA is most commonly associated with natural processes and those elements of the environment, such as surface water or wildlife habitat, that are directly affected by or contribute to environmental well-being, its authority also extends to the "built environment," including aesthetic and other concerns. Most, if not all, of the open space resources identified in the Open Space and Conservation Plan are included on the SEPA list of environmental elements and can be reviewed, regulated, and potentially protected under SEPA.

In this respect, SEPA is similar to the Comprehensive Plan but County authority to condition project approval under SEPA requires that mitigation be directly related to specific adverse impacts resulting from a particular proposal or activity. This is substantially different and more limited than the authority in the Comprehensive Plan. And although aesthetic and scenic resource issues are within the scope of SEPA, such issues are generally addressed more effectively through a site design review or similar process.

Nonetheless, SEPA authority is well supported by the courts and can be a reliable tool for open space conservation. Thus, SEPA could be viewed, not just as an alternative to or replacement for changes to other regulations, but also as a companion review and conditioning process which may provide a means of legal insurance for any regulatory approach the County adopts.

Findings:

1) Conservation of open space resources by mitigating impacts through the County SEPA ordinance is largely dependent on three factors: specific SEPA policies (which have not been adopted), other policies incorporated by reference in the SEPA ordinance (which are vague or unrelated to open space resources), and environmentally sensitive areas (which have not been adopted for specific resources). Specific open space and conservation policies, coupled with the designation of environmentally sensitive areas and the removal of eligible categorical exemptions from such areas, are needed if SEPA is to be an effective conservation tool.

2) The additional policies and environmentally sensitive areas designations could expand County SEPA authority in several ways: the County could impose conditions to conserve open space resources that qualify as elements of the environment (as defined in SEPA) but which currently receive little consideration for mitigation; and, the scope of SEPA review could be expanded to minor new construction in environmentally sensitive

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areas and include single-family house construction and grading of less than 150 cubic yards.

Recommendations:

1) Adopt new SEPA policies which refer specifically to open space resources that are also elements of the environment as defined in SEPA. These may be in addition to new policies adopted in the Comprehensive Plan or Conservation Overlay District. If Comprehensive Plan or Overlay District policies are used in place of SEPA policies, they should be incorporated by reference in the SEPA ordinance.

2) Designate specific categories of open space resources as **environmentally sensitive areas** based on the SEPA elements of the environment and mapping requirements, and eliminate all eligible categorical exemptions from them. Not all of the open space resources will meet the definition of environmentally sensitive areas, but view corridors, historic or cultural sites and ridge lines (if they have steep slopes or unstable soils) should be considered in addition to more traditional areas like wetlands and wildlife habitat. The classifications and maps must be included by reference in the SEPA ordinance.

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Shoreline Master Program

Background

The Shoreline Master Program was adopted in accordance with the State Shoreline Management Act which prescribed its jurisdiction, policy and review requirements. Regulation under the SMP is geographically limited to the statutorily defined 200 foot shoreline area. County ability to establish regulation under the SMP is circumscribed by state law.

The structure of the SMP is very similar to the Comprehensive Plan in that shoreline environments are designated and regulations are then imposed depending on the use and the designation.

There are some exemptions to SMP permit requirements established in state law, including that for a single-family house built for use by the applicant and family, if it is within the required height limit and otherwise meets all applicable requirements. The exemption does not relieve the obligation to comply with the policies and regulations but does allow the project to bypass the shoreline permit process.

Evaluation

The SMP probably comes closest to an existing regulatory scheme for addressing and conserving open space resources. This is not to say it addresses all open space issues or resources, but it does suggest a model for a comprehensive regulatory framework in which they could be addressed.

Although the SMP contains considerably more references to natural systems and open space resource elements and concerns than the Comprehensive Plan, its regulations, particularly those relating to open space conservation, are expressed in the form of exhortatory policies and goals, making conditioning an uncertain process.

Finding:

Definitions, policies, regulations and review criteria in the same manner as proposed for the Comprehensive Plan. Any program to provide enhanced protection to open space resources will require such amendments to the SMP. Because the process of amending a master program can be lengthy and difficult, it is advisable that the same open space issues be addressed in the SEPA ordinance and Comprehensive Plan, as this will provide interim protection. (SMP Section 16.40.207 requires that shoreline development proposals be consistent with, inter alia, the Comprehensive Plan.)

Recommendation:

Adopt definitions, policies, regulations and review criteria in the same manner as proposed for the Comprehensive Plan.

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County Land Division Ordinance and State Subdivision Statute

Background

The County Land Division Ordinance (SJCC Section 16.04) derives its authority from the State Subdivision Statute (RCW 58.17) and provides regulations for short plats (four or fewer lots) and formal plats. Local jurisdictions have authority to increase the threshold for short plats from four lots to nine. There are numerous exemptions to the platting process.

The statute requires that "appropriate provisions" must be made by all subdivisions for "the public health, safety and general welfare, [and] for open spaces," and further provides that "dedication of land to any public body may be required as a condition of subdivision approval." (RCW 58.17.110) While the statute does not allow requirement of dedications arbitrarily, it does provide opportunity to conserve or create open space within the limits of platting authority.

Evaluation

The County ordinance describes "plat design standards" under the headings of common areas, clustering, natural resources, buffer zones, and topography. However, these are no more than exhortatory "standards" (e.g., "to the greatest extent possible, all subdivisions shall be designed to conform to the natural features of the land" SJCC 16.04.365; "the Administrator shall encourage clustering of units and lots in land division proposals" SJCC 16.04.362; "care shall be taken in habitat and feeding sites" SJCC 16.04.363). San Juan County does not have precise regulatory authority to preserve such open spaces resources by imposing cluster or buffer standards. Such requirements would be particularly useful for short plat approval because short plats are exempt from SEPA (unless located in an environmentally sensitive area and removed from categorical exemption).

One application to the Planning Department, the "MacLeod Farm Short Plat," illustrates the difficulty in trying to impose cluster standards or other conservation conditions on a project without specific regulations directed to the conservation of open space. This short plat was proposed for an 80 acre farm on Lopez Island, designated Rural-Timber/Agriculture. The applicant wanted to divide it in a way which potentially would have precluded future agricultural use. In its staff report, the Department acknowledged the absence of mandatory clustering requirements in the Land Division Ordinance but asserted the authority to "encourage" clustering, pursuant to policies in the Comprehensive Plan. In the alternative, the Department report acknowledged its ability to deny the short plat application based on the authority of the Forest Practices Act but pointed out that, in the long term, this would not prevent simple land division down the road to the detriment of agricultural use. The result was ultimately a compromise with the applicant, under the short plat provisions, which may not have accomplished all of the protective purposes of the Comprehensive Plan. With protective provisions in effect, conservation may have been accomplished.

Finding:

Regulations for site planning and design to conserve open space resources should be added to plat design standards.

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**Regulation for Conservation
of Open Space Resources****Recommendation:**

Adopt explicit regulations for site planning and design to conserve open space resources based on any Comprehensive Plan or SEPA revisions that address them. To protect identified open space resources, specific requirements such as buffers and clustering should be incorporated in plat design standards.

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3.2 Proposed New Regulations

In addition to changes recommended for existing plans and ordinances, the County should adopt three new measures: a Conservation Overlay District Ordinance, an Environmentally Sensitive Areas Ordinance, and a Clearing Ordinance. In combination with existing tools and the Open Space and Conservation Plan and Resource Atlas, these ordinances would augment education and acquisition efforts and incentives.

Conservation Overlay District

Of the proposed new ordinances this would most directly incorporate the inventory and analysis of open space resources documented by the Open Space and Conservation Plan. It is the key means to address significant open space resources which are valued for their contribution to the visual quality of the landscape rather than as natural resources (such as wetlands).

The OSCC reviewed a draft model ordinance and examples of similar ordinances used by other Puget Sound area communities and discussed these in terms of the general purpose, structure and approach to be taken in a Conservation Overlay District.

For the first time, the Atlas defines the characteristics that make up "the natural beauty and resources of the islands [and] the present rural, residential, agricultural atmosphere" which the Comprehensive Plan (SJCC 16.44.040A) states as its first goal. With these defined, we can determine how different forms of land alteration and development affect those characteristics and conserve them through the careful location and design of new development activities.

Building design standards are not recommended. This ordinance would instead establish, for each open space resource type, site design standards which would conserve vulnerable resources while providing for the type and intensity of land use and development currently allowed by the Comprehensive Plan and Shoreline Master Program.

The Conservation Overlay District is proposed to apply to actions for which a building or land use permit is required when the use or development would occur on or adjoining areas described in the Atlas as pastoral landscapes, prominent geographic features, view corridors, ridge lines and high contrast edges, and inland and shoreline areas that are not wooded.

The ordinance should provide for administrative assessment of compliance with adopted standards with the opportunity to appeal to a new review body, a site design review board. That board's functions and powers would be specified in the ordinance. The authority for this ordinance is provided in the general grant of powers provided in the state Planning Enabling Act, RCW 36.70.

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Environmentally Sensitive Areas Overlay District Ordinance This ordinance would be similar to the Conservation Overlay District in that it would identify open space resources and apply performance standards for their conservation. It differs in that it would primarily address natural resources and natural hazards.

The OSCC reviewed a draft model ordinance and examples of ESA ordinances adopted by other jurisdictions in recent years. These are usually very complex and technical, mostly due to a growing awareness of the importance of such areas as well as the need to withstand a legal challenge. An ESA ordinance provides the framework for designating environmentally sensitive areas and reviewing the effects of land alteration on them. It should establish its own review and approval requirements but also designate ESA for SEPA purposes (see discussion of SEPA, above) and be incorporated into the existing environmental review process established for ESA in the local SEPA implementing ordinance, SJCC 16.24.

The ESA Overlay District Ordinance should also be made a subarea plan of the Comprehensive Plan and adopted under SJCC 16.44.170C, Overlay Districts.

The ordinance should include specific definitions and location maps for all those open space resources which are included in the SEPA list of elements of the environment (WAC 197-11-440), and establish performance standards for the conservation of each eligible resource type, based on its specific sensitivities to land alteration and development. The ordinance should address at least the following: wetlands, significant plant and animal habitat areas, steep unstable slopes/erosion hazard areas, flood hazard areas, view corridors, stream corridors, aquifer recharge areas, and historic sites.

**Regulation for Conservation
of Open Space Resources****Clearing and Grading Ordinance**

The Clearing and Grading Ordinance is an important component of the regulation package because land clearing for development can be particularly detrimental to open space resources. This ordinance would be effective in concert with the Conservation and ESA Overlay District Ordinances if it allows clearing within the defined resource areas only after, and in accordance with, the approval of a development project itself. Currently, much opportunity to conserve open space resources is lost when clearing and road construction occurs in advance of any application for land use or development permits.

Regulation of "forest practices" is largely reserved to the state. The County can exercise its land use policy and zoning authority over timber harvesting only if a Class IV Forest Practices Permit application indicates the owner intends to convert the land from forestry to another use. However, this limited authority appears to be evolving in Washington, becoming broader as more jurisdictions are challenging the Department of Natural Resources permitting practices and as DNR is beginning to enter agreements with counties to allow greater local authority over forest practices.

One such agreement, between DNR and King County, allows the county to regulate clearing on lands designated in a manner that indicates it is likely to be converted to a nonforestry use (i.e., for urban or mixed uses). Those lands are subject to the local clearing ordinance unless the property owner is willing to maintain the property in a current use taxation program, have a forest management plan, and agree to restore the property to the condition it would have to be in under the local ordinance if, in fact, it is converted.

In localities without such agreements, authority of a clearing ordinance is limited to noncommercial timber harvest, such as clearing for an individual house site exempted from Forest Practices Act permit requirements.

DNR has indicated it may be willing to establish similar agreements with other counties. A draft model ordinance and samples of similar ordinances adopted in other Puget Sound jurisdictions were discussed by the OSCC.

The existing grading regulations in the Comprehensive Plan (Sec. 16.44.100) provide little direction for controlling land alterations in a manner that conserves open space resources. As clearing and grading commonly occur together this ordinance should also specify protective standards for the location and conduct of grading operations to conserve open space resources.

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Bibliography

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Bibliography

(selected)

American Farmland Trust, Western Office, *Saving the American Farm. A Handbook for Conserving Agricultural Land*, January 1990.

Bald Eagle Oversight Committee, *Annual Report*, 1987-88.

Bauer, Wolf, *San Juan County Class I Beach Inventory*, 1973.

Burns, Robert, *The Shape and Form of Puget Sound*, University of Washington Press, Seattle, 1985.

Carlson, Chris, *Skykomish River: A Preliminary Scenic Assessment Procedure*, Technical Paper, Rivers and Trails Technical Conservation Assistance Program, Pacific Northwest Region, National Park Service, September 1990.

Chenoweth, Richard E., and Bernard Niemann, Jr., *Beauty and the Beast: Aesthetic Policy for the Lower Wisconsin River*. Department of Landscape Architecture, University of Wisconsin, Madison. 1986.

Chenoweth, Richard E., and Paul H. Gobster, *Wildland Description and Analysis*. In Smardon, Richard C., James Palmer and John Felleman. *Foundations for Visual Project Analysis*. New York: John Wiley and Sons. 1986. pp 81-101.

Chenoweth, Richard E., *Visitor Employed Photography: A Potential Tool for Landscape Architecture*, Landscape Journal Volume 3 no. 2. 1984. pp 136-143.

Fox, James R. and Christopher Hodgkin, 1989 *Economic and Demographic Almanac of Washington Counties and Cities*, 1989.

Friday Harbor Community-wide Survey: Recommendations, June 25, 1990.

Madrona Group, *San Juan County: An Economic and Demographic Study*, 1987.

Northwest Office of The Nature Conservancy, *Inventory of Natural Areas on Private Lands, San Juan County*, January 1975.

Regional Plan Association (New York), *Tools and Strategies: Protecting the Landscape and Shaping Growth*, Open Space Imperative #3, April 1990.

San Juan County Comprehensive Land Use Plan and Regulations

San Juan County Land Division Ordinance.

San Juan County Planning Department, *Eastsound Village Plan*, December 15, 1981.

San Juan County Planning Department, *Public Benefit Rating System of the San Juan County Open Space Program*, March 28, 1990.

San Juan County Planning Department, *Water Assessment for San Juan County*, December 1985.

San Juan County Shoreline Master Program.

San Juan County

Open Space &

Conservation

Plan

Bibliography

- San Juan County Transportation Policy Plan.*
- Stokes, Samuel N., *Saving America's Countryside: A guide to Rural Conservation*, The National Trust for Historic Preservation, 1989.
- U.S. Department of the Interior, Office of the Assistant Secretary for Fish and Wildlife and Parks, *New Tools for Land Protection: An Introductory Handbook*, July 1982.
- US Geological Survey, *Water Resources Investigations Report 83-4019, Occurrence, Quality, and Use of Ground Water in Orcas, San Juan, Lopez, and Shaw Islands, San Juan County.* [n.d.].
- USDA Soil Conservation Service, *Prime Farmland, San Juan County, Washington*, April 1980.
- USDA Soil Conservation Service, *Soil Survey of San Juan County, Washington*, 1957.
- Washington Department of Community Development, *Minimum Guidelines to Classify Agriculture, Forest, Mineral Lands and Critical Areas*, August 24, 1991 Draft.
- Washington Department of Community Development, Office of Archaeology and Historic Preservation, *National Historic Landmarks, National Register of Historic Places, Determined Eligible for National Register, State Register of Historic Places, Properties Removed from Listing*, June 25, 1990.
- Washington Department of Ecology, *Coastal Zone Atlas of Washington: Volume Three, San Juan County*, October 1978.
- Washington Department of Ecology, *Geology and Water Resources of the San Juan Islands*, 1975.
- Washington Department of Ecology, *Wetlands Preservation: An Information & Action Guide*, February 1990.
- Washington Department of Natural Resources, *Your Public Beaches: San Juan Region*, January 1985.
- Washington Department of Wildlife, *A Technical Workplan for Defining & Identifying Priority Wildlife Habitats & Species.*, March 1, 1990.
- Washington Department of Wildlife, *Draft Species Lists, Definitions, and Mapping Criteria, Priority Habitat and Species Project*, June 22, 1990.
- Washington Department of Wildlife, *Management Guidelines for Species of Concern*, [n.d.].
- Washington Department of Wildlife, *Management Recommendations for Priority Species*, [n.d.].
- Washington Department of Wildlife, *Nongame Data Systems Special Animal Species*, [n.d.].

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Open Space &

Conservation

Plan

Bibliography

- Washington Department of Wildlife, *Priority Habitats & Species*, [n.d.].
- Washington Department of Wildlife, *Species of Concern Documented in San Juan County*, June 1990.
- Washington Natural Heritage Program Information System, *Locations of Endangered, Threatened and Sensitive Plants, High Quality Native Wetlands and Native Plant Communities in San Juan County*, May 1990.
- Washington Natural Heritage Program, *Biennial Final Natural Heritage Plan*. 1989.
- Washington Natural Heritage Program, *Puget Trough Coastal Wetlands, A Summary Report of Biologically Significant Sites*, January 1984.
- Washington State Department of Ecology, *San Juan County Watershed Ranking*, November 22, 1988.
- Washington State Department of Ecology, *Wetlands Acquisition & Preservation, A Guide for Landowners and Government Agencies*, December 1986.
- Washington State Department of Natural Resources, *San Juan Islands Trust Land Management Plan*, May 1986.
- Washington State Employment Security, *San Juan County Profile*, March 1990,

