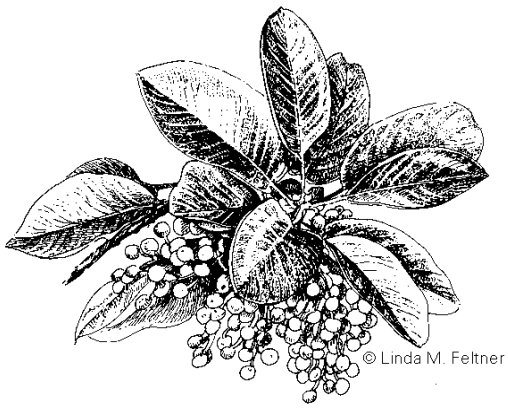
COLD CREEK NATURAL AREA

Mary Cash Farm
Cold Creek
Bassett Pond

Site Management Plan



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Waterways 2000

Waterways 2000 was initiated in 1993 by the Metropolitan King County Executive and Council as a pilot program to establish a system of connected habitat lands and waterways within the County for the protection of salmon and wildlife habitat. Under the leadership of the COC, the County's most critical waterways were identified and methods for their cost-effective acquisition were outlined. The majority of properties were purchased in fee; with others, conservation easements were acquired or they were enrolled in the County's Public Benefit Ratings System (PBRS), which allows property owners tax reductions for land left in open space. As a result, over 2,000 acres throughout King County now provide:

- Protection of high quality aquatic systems and habitat lands for salmonids and wildlife
- Preservation of properties of cultural, scenic, and historic importance
- Educational and passive recreational opportunities
- Opportunities for public participation in natural area stewardship

The Waterways 2000 partnership between King County, landowners, and the community has proven to be effective in acquisition and stewardship of valuable natural areas. Public support will continue to be critical in the long-term protection of waterways and the expansion of protection to other basins, and the Waterways program will provide a successful guide for those efforts. As our population grows, so will our need for viable wildlife habitat, healthy stream systems, and clean water. Future generations of residents and wildlife will benefit from this important effort.

EXECUTIVE SUMMARY

The Cold Creek Natural Area comprises approximately 250 acres within the upper reaches of Cottage Lake Creek, which was targeted by the Waterways program as one of the highest quality, salmonid-bearing tributaries in the Big Bear Creek drainage basin. The Natural Area includes existing King County parks at Mary Cash Farm (formerly Daniels Creek Park) and Bassett Pond and contains extensive wetland systems, salmon-bearing streams (Cold Creek and Cottage Lake Creek/Daniels Creek), and springs. Consisting largely of scrub-shrub and forested wetlands, it also includes two small upland areas and an old blueberry farm. While the Bear Creek watershed is becoming increasingly urbanized, Bear Creek supports chinook, sockeye, coho, kokanee, steelhead, and cutthroat as well as the largest freshwater mussel population known in King County. The listing of wild Puget Sound Chinook salmon, bull trout and potentially other species of salmonids under the federal Endangered Species Act (ESA) will likely result in increased protection and restoration activities within the Bear Creek system and the Natural Area will be an important asset in those efforts. In addition, the actively involved Bear Creek area community will continue to be an important force for the conservation and enhancement of these lands and waterways.

The Natural Area will be managed to protect natural systems and salmon habitat, maintain and enhance wildlife habitats and corridors, and preserve scenic areas. Where public use does not compromise these resources, low-impact passive recreational, interpretive, and educational opportunities will be provided. The following reflect Waterways 2000 program goals and will be used to establish balanced management of the natural area:

- Preserve, protect and restore natural systems for fish and wildlife habitat
- Preserve the rural nature of the site in keeping with the surrounding community
- Eliminate incompatible uses which degrade sensitive site resources
- Provide site improvements to direct public use in appropriate areas
- Provide interpretive value for the community and foster public involvement in site stewardship
- Retain and maintain a very minimal portion of the historical agricultural use (blueberries) to allow for interpretation of the historical use of the property.
- Comply with restrictions resulting from the listings of salmonids and other species under ESA
- Implement recommendations in phases according to priority order and available funding

Significant resources at the Cold Creek Natural Area include:

- A large portion of the Big Bear Creek #10 wetland, a King County Class 1 wetland rating for size, diversity of vegetation, and open water component
- Wetlands, streams, and biotic communities within the upper reaches of the Cottage Lake Creek and Bear Creek basin which play a critical role in the health and vitality of the downstream system
- Cold Creek (WRIA # 08.0126), a King County Class 2 stream which provides essential cool waters to the Cottage Lake Creek and Bear Creek system, especially in the critical summer and fall months
- Cottage Lake Creek/Daniels Creek (WRIA # 08.0122), a King County Class 2 stream that supports significant populations of chinook, sockeye, coho, kokanee, steelhead, and cutthroat
- High quality, diverse habitat for a variety of resident and migratory bird species as well as habitat for numerous terrestrial and aquatic wildlife, including river otter, beaver, coyote, black bear, and native amphibian species
- A peat deposit of state significance

The following general planning and design elements are recommended for the Cold Creek Natural Area:

- Maintain and enhance stream and riparian systems for salmonids and wildlife with native species plantings in degraded areas, buffer zones and other portions of the site where a coniferous overstory is a long-term goal
- Designate site uses: nature observation, hiking, photography, interpretation and education
- Regularly monitor general site conditions for dumping, illegal access, and resource degradation
- Utilize existing County programs (as funding allows) to periodically monitor for water quality, habitat values, and restoration efforts onsite in order to gauge the success of protection and enhancement activities
- Coordinate with neighbors, community groups, and schools to steward the property in conjunction with King County
- Stream/wetland restoration projects and limited retention/maintenance of compatible agricultural uses, as feasible
- Pursue future acquisitions and taxation agreements within the basin to add buffers to the Natural Area, improve connection between the natural area and other resource lands, and generally preserve habitat corridors within the Bear Creek drainage system.

Part I - INTRODUCTION

Foreword

Within the Bear Creek Basin, through the Waterways 2000 program the County acquired almost 300 acres and negotiated more than 430 acres in current-use taxation agreements for a total of 730-acres. Cottage Lake Creek, a major tributary to Bear Creek, is part of the Sammamish River watershed and was targeted by the program for the habitat it provides to Chinook, coho and cutthroat trout, as well as numerous terrestrial and aquatic mammals and amphibians. In the future, the Sammamish River system as a whole and the Cold Creek Natural Area in particular will play an important role in the region's effort to protect, restore, and increase public awareness of threatened salmon runs and the watershed habitats that sustain them (*Figure 1*).

Purpose

The purpose of this document is to provide a record of existing features and to create guidelines for future management of a King County Natural Area within the Upper Bear Creek basin. This plan reflects: 1) a site inventory and analysis of existing natural resources and land uses; 2) Waterways 2000 program goals; 3) King County park land classifications; 4) legal and land use restraints; 5) regional connection to other public lands; 6) King County agency recommendations and staff review; 7) public input; and 8) development costs. Resource information in this plan is a summation of the Technical Appendix prepared for the site. All other information was gathered through interagency cooperation, research and field visits. Collectively this data forms the basis for resource management and public use recommendations for the Natural Area. Once approved by King County, design and cost elements will be refined and phased implementation of recommendations will begin.

Public input was solicited initially with a questionnaire sent to landowners and residents within 1000 feet of the combined Cold Creek and Mary Cash Farm (formerly Daniel's Creek Park)/Bassett Pond boundaries, as well to community groups, other interested individuals, and local newspapers. The first public meeting presenting the resulting feedback was held at the Woodinville Library on January 11th, 2000. Numerous meetings followed between King County and the public, including several with representatives of Watertenders and the Upper Bear Creek Community Council. A summary of the public process is included in this document (*see Appendix B*).

Site Plan Goals

Natural Area management will focus on the protection and enhancement of the natural systems onsite: its fish and wildlife habitats, corridors, and scenic character. Where public use does not compromise these systems, the Natural Area will provide low-impact passive recreational, interpretive and educational opportunities. The following site plan goals reflect the goals of the Waterways 2000 program as well as King County's management of natural areas:

- Preserve, protect and restore natural systems for fish and wildlife habitat
- Preserve the rural nature of the site in keeping with the surrounding community
- Eliminate incompatible uses which degrade sensitive site resources
- Provide site improvements to direct public use in appropriate areas
- Provide interpretive value for the community and foster public involvement in site stewardship
- Comply with restrictions resulting from the listings of salmonids and other species under ESA
- Retain and maintain a very minimal portion of the historical agricultural use (blueberries) to allow for interpretation of the historical use of the property.
- Implement recommendations in phases according to priority order and available funding

Location

The Cold Creek Natural Area is comprised of nearly 250 acres located in the larger Big Bear Creek basin. It is northeast of Redmond and east of the city of Woodinville, just south of the Snohomish County line. The Natural Area extends south for about one mile from Woodinville-Duvall Road, linking two previously existing King County park areas—Mary Cash Farm at the north end and Bassett Pond along NE 165th Street at the south end. The newly created Cold Creek Natural Area is comprised of all three of these sites and management will focus on combined system *(Figure 3)*.

Description

The Natural Area's configuration between the Mary Cash Farm to the north and Bassett Pond to the south forms several topographic and/or vegetative zones. For descriptive purposes, the following areas will be identified (north to south) in the document and figures *(Figures 2 & 3)*:

- Mary Cash Farm buildings and uplands
- forested and shrub wetlands associated with Cottage Lake/Daniels Creek
- old blueberry farm (including old pasture area)
- forested wetland (west of Pheasant Ridge Estates open space)
- Bassett Pond wetlands (from NE 65th to Pheasant Ridge Estates open space and neighborhood)
- Uplands in southwest corner of natural area (orchard, etc.)

The majority of the land within the Natural Area is low-lying and has a high water table. Early logging opened up the land for farming, and the central portion of the site was formerly used as a blueberry farm as well as pasture for several cows. A small peat mining operation once worked the area around Bassett Pond, and created the open water wetland existing today. No roads pass through the Natural Area, and there is no legal access from the Mary Cash Farm to Bassett Pond. Private open space dedicated to the Pheasant Ridge Estates connects adjacent and diagonal Natural Area property corners above the Bassett Pond area. This residential development exists on the low hill to the east that separates the Natural Area from Cottage Lake *(Figures 2 & 3)*.

Conservation Significance

Cottage Lake Creek (WRIA #08.0122), a King County Class 2 salmonid-bearing stream, is one of the highest quality, salmonid-bearing tributaries in the Big Bear Creek system. This level of quality is due to its forested wetlands and forested riparian corridor, as well as extensive, relatively undisturbed wetland complexes in its upper and middle reaches. The Big Bear Creek Wetland #10 is comprised of 230 acres of Class 1 wetland, of which this Natural Area contains over 100 acres in public ownership. Cold Creek, a stream that begins on the west side of the Natural Area contributes to the health of this system by providing low temperatures to the Cottage Lake/Bear Creek system, which is critical to the survival of salmonid populations especially during the critical summer and fall months. Temperatures in Cold Creek are consistently several degrees colder than other streams in the Bear Creek system, due to springs at its source.

Within this extensive wetland area, a variety of habitats exist for resident and migratory bird species, terrestrial and aquatic mammals, fish, amphibians, and reptiles. Salmonid species, such as the Chinook that spawn and rear in Cottage Lake Creek, will be listed as threatened under the Federal Endangered Species Act (ESA). Coho, sockeye, kokanee, steelhead, and cutthroat also spawn and rear in the Cottage Lake Creek/Bear Creek system. The vitality of these fish populations in the Natural Area as well as downstream depends on the quality of wetlands and streams within and upstream of the Natural Area. Maintaining the Natural Area's wetland system and surrounding habitat lands in a productive and healthy state will help to preserve the site's water quality for fish and wildlife and contribute to the larger biological health of the Bear Creek system.

Passive Recreational and Educational Significance

Public understanding and appreciation of the Natural Area will be an asset to the County's efforts to restore salmonids under ESA, as well as essential to local public involvement in stewardship. More than 20,000 acres of parks and open space lands, including more than 200 miles of Regional trails, are maintained by the King County Department of Parks and Recreation. Bassett Pond is roughly three-quarters mile north of the Tolt Pipeline Trail. Cottage Lake Park, roughly one-half mile to the east, is separated from the Natural Area by private residential properties. An access road off of the Woodinville-Duvall Road along the eastern boundary of the Natural area at the Mary Cash Farm currently provides only park maintenance vehicle access to the central portion of the Natural Area. An easement to the westernmost forested portion of the Natural Area is unimproved.

Currently, the Natural Area as a whole receives little public use. Limited parking is available at the Mary Cash Farm site, but the wet nature of much of the Natural Area beyond the park precludes extensive activity. The Mary Cash Farm was designated as a wetlands interpretive center with a small picnic area in a former Master Plan and interpretive programs are offered there. The addition of the center portion of the Cold Creek Natural Area has expanded protection of this wetland complex, and therefore the interpretive and educational possibilities available here. Interpretive activities could highlight the importance of the wetland system to fish and wildlife habitat in the larger Big Bear Creek system. The effects of past site use and a list of future restoration efforts could also be displayed. Active community groups in the area may use Mary Cash Farm as a staging area for stewardship activities onsite and throughout the area. Water Tenders, a local community group, has been involved in the County's "Adopt-a-Park" program at all three areas of the Cold Creek Natural Area and other King County lands in the Upper Bear Creek basin.

At the first public meeting focusing on the development of this plan, comments received generally favored a "less is more" approach to providing public access to the site. There was general interest in providing seasonal (and limited) access to the interior. There was also interest in exploring equestrian access onsite if suitable terrain exists, which was determined to be inappropriate due to the presence of streams, wetlands and former agricultural ditches. Also expressed by some was a desire to continue some limited form of agriculture at the old blueberry farm portion of the site if feasible. Generally, however, the site was seen as acceptable "as is" and improvements would be best limited to providing viewing opportunities at both the uplands at Bassett Pond and/or the former homesite along the access road to the blueberry farm property. Interpretive signage, controlling non-native species growth, preventing illegal activities onsite, and improving facilities at the Mary Cash Farm were also seen as important.

Part II - SITE INVENTORY AND ANALYSIS

NATURAL RESOURCES

Topography

The Natural Area is located within a low valley with gentle slopes rising to the west and a small, low hill to the east. This low hill separates the low-lying land within the Natural Area from Cottage Lake. Much of the surrounding higher-elevation land is becoming suburbanized with housing developments, but the Natural Area is generally within low-lying wetlands that have numerous constraints on building. A large section of the visual and topographical reach of the Natural Area is actually open space dedicated to the Pheasant Ridge Estates development to the east, which is also low-lying terrain.

Soils

Poorly drained soils are found throughout most of the Natural Area. The northern end of the Natural Area is underlain by Norma soils that formed since the last period of glaciation in low basins and along stream bottoms. These soils are usually a black sandy loam several inches thick. Underlying this is a dark sandy loam subsoil extending several feet below the surface. The seasonal water table is at or near the surface.

South of Daniels Creek are soils of the Seattle Series (Seattle Muck). These are very poorly drained organic soils that formed in material derived primarily from sedges and formed since the last period of glaciation along river and stream valleys. The surface layer is black muck 0 - 11inches thick and it is underlain by dark muck and mucky peat that extends to a depth of 60 inches or more. The seasonal water table is at or near the surface here as well.

The State of Washington identifies a peat resource area 85 acres in size located south and west of Cottage Lake, centered at Bassett Pond. This peat deposit is close to 30 feet deep and has been mostly altered from the sphagnum bog condition of the site in 1928. Those bog alterations included burning, agricultural activities, and peat excavation, which created an open water habitat.

Pockets of higher ground in the northern half of the Mary Cash Farm are underlain by somewhat excessively drained Everett soils. These soils formed in glacial outwash areas and consist of very gravelly sand to a depth of 18 to 36 inches. The southwestern corner of the Bassett Pond area is also underlain by Everett soils.

Hydrology

Two streams, a number of unnamed springs and tributaries, springs, and Bassett Pond are the main surface water features of the Natural Area. All are part of the Bear Creek system that flows south to join Evans Creek and from there to the Sammamish River *(Figure 4)*.

Cottage Lake Creek (WRIA # 08.0122), a King County Class 2 salmonid-bearing stream is a main tributary in the Bear Creek system. The creek originates in Snohomish County in wetlands associated with Little Lake near Maltby, from which it flows south to Crystal Lake then on to Cottage Lake. Above Cottage Lake, this creek is called Daniels Creek. It flows under the Woodinville-Duvall Road and enters the northern portion of the Natural Area, flowing through deciduous forested and scrub-shrub wetlands and then to the northern portion of the Natural Area before passing through privately held parcels to the east and on to Cottage Lake. The creek has a gentle gradient here and on-site habitat types include glides, riffles, and pools. The latter are common near old woody debris and at bends. Substrate in this reach includes fines, sand, and small gravels.

Cold Creek (WRIA # 08.0126), the second large waterway onsite, enters the Natural Area from the west as a large spring just west of 174th Ave. NE, at the midpoint of the site. Named because of its low temperatures, this creek flows through mixed-forested wetlands that include diverse instream structure. A gradual gradient characterizes this reach causing glides and riffles. Old large woody debris is commonly buried within the stream channel, creating numerous pools. Logs are frequently criss-crossed over the channel, and over-hanging banks are common especially under coniferous tree roots. Temperatures are as much as five degrees (Celsius) colder than other streams in the Bear Creek system. As Cold Creek enters the lower portion of the Natural Area, above Bassett Pond, it flows in a straightened and relatively uniform channel through emergent and scrub-shrub wetlands. A drainage ditch, which marks the western and southern boundaries of the old blueberry farm, is fed by numerous small perennial springs meandering through forested wetlands, and joins Cold Creek just north of Bassett Pond.

Cold Creek joins the outflow of Cottage Lake and continues as Cottage Lake Creek near the southern end of the Natural Area, east of Bassett Pond. This stream flows southeast for roughly three and a half miles to join Bear Creek. Bassett Pond is a significant open water feature that adds diversity of wetland habitat to the Natural Area.

Vegetation

A large wetland complex exists in flat, low-lying land between Woodinville-Duvall Road and NE 165th Street within the vicinity of the Natural Area. A few small patches of drier soils support upland vegetation within or along the edge of this wetland system (e.g., in the vicinity of the renovated farm buildings at the Mary Cash Farm, the western portion of the Pheasant Ridge Estates open space; and the old orchard at Bassett Pond). Past land uses have altered the vegetation communities originally found throughout the Natural Area and the age of existing trees reflects the time since the most recent disturbance. The following general vegetation descriptions correspond to eight natural resource areas *(Figure 4)* and plant species observed on site *(Table 1)*.

Mary Cash Farm Uplands
Stately Douglas firs are growing in well drained soils in the vicinity of the old farm structures and parking area at the Mary Cash Farm. Some ornamental shrubs occur under these large conifers. A large meadow used previously as an old pasture with pockets of wetlands lies east of the parking area and buildings. South of the buildings, pasture grasses and weedy, herbaceous species dominate small, old pastures and blackberries cloak trees and form dense thickets.

Daniels Creek Wetlands
Deciduous forested wetlands are interspersed with scrub-shrub and emergent wetlands in low-lying land associated with Daniels Creek at the Natural Area. These wetland habitats extend along Daniels Creek west and east of the Natural Area. Agricultural wetlands (the blueberry farm) lie just to the south of these deciduous forested and scrub-shrub wetlands. A small trail leads from the Mary Cash Farm parking area across Daniels Creek, through forested wetlands, continues across a ditched, secondary channel of Daniels Creek, and ends at the former blueberry farm.

Dense young alder, roughly four to five inches in diameter, form the canopy in forested wetlands. Individual Sitka spruce or groves of western hemlock and/or western red cedar are infrequent and scattered throughout this portion of the wetland. Saplings of these conifers are few and are usually restricted to hummocks created by conifer tree roots.

Salmonberry is dominant under the canopy of red alder. Other species include twinberry, vine maple, red elderberry, spiraea, and red-osier dogwood. Salal and red huckleberry are restricted to stumps and logs. Skunk cabbage is common throughout this cover type. Other groundcover species include creeping buttercup, lady fern, piggyback plant, manna grass, hedge-nettle, deer fern, slough sedge, and small-fruited bulrush.

Pockets of willow and salmonberry-dominated scrub-shrub wetlands occur within deciduous forested wetlands. This scrub-shrub wetland cover type is composed of willows, salmonberry, crab apple, red-osier dogwood, and twinberry. Understory species often include skunk cabbage, manna grass, stinging nettle, lady fern, and water parsley. Invasive species such as reed canarygrass, bittersweet nightshade, and jewelweed form dense mats under an open canopy along the northern boundary of the blueberry farm and along Daniels Creek within the Mary Cash Farm.

Former pasture areas support emergent wetland plant species between Daniels Creek and the old farm structures at the Mary Cash Farm. Soft rush, creeping buttercup, sedge, manna grass, and small-fruited bulrush are common species in these old pasture areas. Yellow flag iris and jewelweed are common along creek or ditch edges with open canopies.

Agricultural Wetlands (Old Blueberry Farm)
A large part of the central portion of the Natural Area historically was converted from forested wetland to agricultural uses, including the farming of blueberries. Extensive ditching in the vicinity of the blueberry fields was conducted in an attempt to lower the water level.

Table 1: Plant Species Observed at the Cold Creek Natural Area

SCIENTIFIC NAME	COMMON NAME
FERNS AND ALLIES	
Athyrium filix-femina	Lady Fern
Blechnum spicant	Deer Fern
Dryopteris expansa	Spiny Wood Fern
Equisetum spp.	Horsetail
Polystichum munitum	Sword Fern
Pterdium aquilinum	Bracken Fern
HERBS	
Claytonia sibirica	Siberian Miner's-Lettuce
Cirsium sp.	**Thistle**
Dicentra formosa	Pacific Bleeding Heart
Epilobium angustifolium	Fireweed
Epilobium ciliatum	Willowherb
Geranium robertsonii	**Robert's Cranesbill**
Geum macrophyllum	Large-leaved Avens/Geum
Hieracium sp.	**Hawkweed**
Iris pseudacorus	**Yellow Flag Iris**
Impatiens noli-tangere	**Jewelweed**
Lysichiton americanum*	Skunk Cabbage
Lythrum salicaria	**Purple Loosestrife**
Maianthemum dilatatum	False Lily of the Valley
Oenanthe sarmentosa	Water Parsley
Plantago lanceolata	**Long-leaf Plantain**
Ranunculus repens	**Creeping Buttercup**
Rorippa sp.	**Watercress+**
Rumex crispus	**Dock**
Solanum dulcamara	**Bittersweet Nightshade**
Stachys cooleyae	Hedge Nettle
Streptopus roseus	Rosy Twistedstalk
Tellima grandiflora	Fringecup
Tiarella trifoliata	Foamflower
Tolmiea menziesii	Piggy-Back Plant
Trillium ovatum	Western Trillium
Typha latifolia	Broad-leaved Cattail
Urtica dioica	Stinging Nettle
Veronica americana	American speedwell
GRASSES	
***Agrostis* sp.**	**Bent Grass+**
Dactylis glomerata	**Orchard Grass**
Festuca sp.	**Fescue**
Glyceria sp.	Manna Grass
Holcus lanatus	**Velvet Grass**
Phalaris arundinacea	**Reed Canarygrass+**
RUSHES AND SEDGES	
Juncus bufonius	**Toad Rush**
Juncus effusus	Soft Rush
Juncus ensifolius	Dagger-leaf Rush
Juncus spp.	Rush
Carex obnupta	Slough Sedge
*Carex utriculata**	Beaked Sedge
Carex spp.	Sedge
Scirpus microcarpus	Small-fruited bulrush
SHRUBS AND SMALL TREES	
Acer circinatum	Vine Maple
Cornus stolonifera	Red-osier Dogwood
Cytisus scoparius	Scot's Broom
Gaultheria shallon	Salal
***Ilex* sp.**	**Holly**
Ledum groenlandicum	Labrador Tea
Lonicera involucrata	Twinberry
Menziesia ferruginea	False Azalea
Oemleria cerasiformis	Indian Plum
Oplopanax horridus	Devil's Club
Ribes lacustre	Black Swamp Gooseberry
Rubus discolor	**Himalayan Blackberry**
Rubus laciniatus	**Evergreen Blackberry**
Rubus spectabilis	Salmonberry
Rubus ursinus	Trailing Blackberry (Dewberry)
Salix spp.	Willow
Sambucus racemosa	Red Elderberry
Spirea douglassii	Hardhack
Vaccinium parvifolium	Red Huckleberry
Viburnum edule	High Bush Cranberry
TREES	
Acer macrophyllum	Big Leaf Maple
Alnus rubra	Red Alder
Betula sp.	Birch
Malus fusca	Crab Apple
Picea sitchensis	Sitka Spruce
Pinus contorta	Lodgepole Pine
*Populus balsamifera var. trichocarpa**	Black Cottonwood
Populus tremuloides	Aspen
Pseudotsuga menziesii	Douglas Fir
Rhamnus purshiana	Cascara
*Salix lucida ssp. lasiandra**	Pacific Willow
Thuja plicata	Western redcedar
Tsuga heterophylla	Western Hemlock

Notes:
Bold indicates non-native species.
+ Indicates native status undetermined.
* Identifies updated plant names. Updated taxonomy follows Hickman (1993). All other nomenclature follows Hitchcock and Cronquist (1978).
This species list only includes species observed during late summer/early fall `97 site visits and is strictly seasonal and limited in nature.

Most of the northern most patches of blueberry bushes have not been maintained in the recent past and consequently are overrun with spiraea and blackberries. However, a small portion of this area (approximately 50 by 300 feet to the west of the access road) has recently been restored and is proposed to be maintained as such. The southern blueberry field is in better condition and many of the bushes are accessible. The last owner grazed a small herd of cattle throughout the blueberry farm property. As a result of a variety of disturbances, many non-native and/or invasive wetland species are common in the blueberry farm area including creeping buttercup, reed canarygrass, soft rush, bittersweet nightshade, jewelweed, yellow iris, and blackberry. Less dominant native plant species within the blueberry farm area include skunk cabbage, manna grass, sedge, small-fruited bulrush, spiraea, salmonberry, willow, and twinberry. Growth of many of these non-native and/or invasive species was suppressed by grazing. In the absence of grazing, aggressive species such as reed canarygrass, blackberries, and spiraea probably will rebound with prolific growth.

Uplands East of the Old Blueberry Farm

Former building sites, staging areas, and access roads exist at the eastern edge of the blueberry farm property and are predominately on fill. Upland habitat also is sandwiched between the blueberry farm and suburban land uses to the east.

Forested Wetlands (West of Pheasant Ridge Estates Open Space Parcel)

Stately groves of Sitka spruce, western redcedar, and western hemlock are interspersed with patches of red alder in a 50 plus acre patch of forested wetland west of the Pheasant Ridge Estates open space parcel. Some Sitka spruce are quite large, the largest is 86 inches in diameter (270 inches in circumference). Sizes of Sitka spruce generally range from around 19 to 86 inches in diameter, with many measuring more than 40 inches in diameter. Western red cedar and western hemlock generally range from 12 to 38 inches in diameter. Red alder typically are 11 to 14 inches in diameter. Large black cottonwoods are found infrequently. Sitka spruce and western red cedar saplings and young trees are common in the understory. Red alder snags (generally less than 15 inches in diameter) are scattered throughout the forest. Logs cross over one another on the forest floor under coniferous canopies, forming a substrate commonly used by plant species less tolerant of saturated soil conditions.

Plant species composition and density in the understory varies depending on the canopy cover and substrate. Salmonberry, vine maple, devil's club, and red elderberry form a dense thicket under a relatively open red alder canopy (less than 75 percent cover). Under a closed conifer canopy, the same shrub species have low cover. Other less common understory species include false azalea, salal, red huckleberry, black gooseberry, and highbush cranberry. Skunk cabbage, water parsley, lady fern, wood fern, deer fern, sword fern, foam flower, false lily-of-the-valley, and piggyback plant are common groundcover species.

Open Water Wetlands

Bassset Pond in the southern portion of the Natural Area adds an important open water class to the overall Big Bear Creek Wetland #10 complex. Although it was created from past peat mining, the pond is important for salmonids, waterfowl and wildlife in the wetland complex. This open water is also a scenic amenity.

Emergent and Scrub-Shrub Wetlands Associated with Bassett Pond

Past peat mining, burning, ditching, grazing, and mowing have altered historic plant cover in the southern part of the Natural Area (Basset Pond region). Presently, two plant species, reed canarygrass and spiraea, cover most of this area. Spiraea forms a dense thicket around Bassett Pond and smaller groves are scattered throughout reed canarygrass meadows. Reed canarygrass meadows span the width of the Natural Area and extend from the north end of Basset Pond to the Pheasant Ridge Estates open space parcel.

Several tree and shrub species poke above this sea of spiraea and reed canarygrass. A number of birch have been planted around the perimeter of Basset Pond and lines of spruce follow old ditches or berms west and south of the pond. A lone Sitka spruce stands on the south bank of Cold Creek marking the former location of a wooden bridge that has now disintegrated. Upstream of this spruce, beavers have been active building dams. Willow and red-osier

dogwood are common along Cold Creek's banks upstream of the spruce as well as along a ditch that flows from the blueberry farm and joins Cold Creek just west of the area.

An old footpath from NE 165th Street had traversed the west portion of Bassett Pond, crossed Cold Creek and continued along an old roadbed to the southwest corner of the Pheasant Ridge Estates neighborhood. This path is currently overgrown, very wet, and the crossing has disintegrated and washed away.

Southwest Corner of Natural Area Uplands
Remnants of an old orchard are found on the southwestern corner of the Basset Pond Park site, with deciduous forest along the western edge and mixed coniferous/deciduous forest along some of the southern edge.

Non-native, invasive plant species
Several invasive plant species are distributed throughout all but the mixed (coniferous and deciduous) forested vegetation cover types. Reed canarygrass, jewelweed, bittersweet nightshade, yellow flag iris, and blackberries are found throughout the Natural Area. Reed canarygrass is dominant in most emergent areas, many of which are former pastures. Bittersweet nightshade and jewelweed cover stream channels and ditches in areas of open canopy. Soft rush and creeping buttercup are dominant in old pasture areas. Yellow flag iris is present along Daniels Creek, Cold Creek, and drainage ditches at the old blueberry farm. Blackberries form impenetrable walls in transition areas between forests and pastures, blueberry bushes, and meadows.

Although a major removal of purple loosestrife was conducted at the Mary Cash Farm, several plants have been observed recently. Other non-native species occurring in localized areas at the Natural Area include Scot's broom and thistle. Scot's broom has been cleared from the orchard west of Bassett Pond but young plants can still be found near the stumps of old broom plants.

Vegetative Succession
Drier uplands will develop a more coniferous character with time, especially if assisted with native plantings, monitoring and maintenance. Western red cedar and western hemlock will come to dominate as long as the area remains undisturbed. Edges will continue to support deciduous plants such as vine maple, red alder, salmonberry, and red elderberry. Without further disturbance, mixed-forested wetlands will also develop a more coniferous character as existing patches of red alder are replaced by Sitka spruce, western hemlock, and western red cedar. Several lone Sitka spruce and a small grove of western hemlock and western red cedar will grow to dominate in the forested wetland composed of red alder near the Mary Cash Farm. Spiraea-dominated wetlands may cover areas currently occupied by reed canarygrass.

The original blueberry farm had been grazed by a small herd of cattle that kept most of the plant species trimmed low to the ground. In the absence of grazing, aggressive species such as reed canarygrass, blackberries, and spiraea will become dominant here. Rows of blueberry bushes will become engulfed in spiraea, salmonberry and blackberries, as has already occurred in the more northern and western patch of bushes. It is proposed that the recently restored patch of blueberries west of the access road will be maintained by volunteer or county staff.

A drainage ditch marks the old blueberry farm boundaries on the west and south and joins Cold Creek north of Bassett Pond. Over time, invasive shrubs will likely grow up along the ditch. The steep-sided, deep shape of the ditch, which holds groundwater, will persist for decades since the gradient is low and flooding will not create new channel features.

Wildlife

A list of species observed on site *(Table 2)* supplements the following general fish and wildlife information. This list is not exhaustive; other species are expected to occur onsite. Wildlife Habitat Corridors, as identified in the 1996 King County Comprehensive Plan, are shown on this site's Natural Resources map *(Figure 4)*. A wildlife survey has not been performed at the Natural Area.

Table 2: Wildlife Species Observed at Cold Creek Natural Area

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
MAMMALS		**AMPHIBIANS**	
Canis latrans	Coyote	*Bufo boreas*	Western Toad
Castor canadensis	Beaver	*Pseudacris regilla*	Chorus Frog
Lutra canadensis	River Otter	***Rana catesbiana***	**Bullfrog**
Lynx rufus	Bobcat		
Odocoileus hemionus	Blacktail Deer (Mule Deer)	**OTHER FRESH-WATER FAUNA**	
Ondatra zibethica	Muskrat		
Procyon lotor	Raccoon	*Margaritifera falcata*	Freshwater Mussel
Sylvilagus sp.	**Cottontail Rabbit+**		
Tamiasciurus douglasi	Douglas Squirrel		
Ursus americanus	Black Bear		
BIRDS			
Wading Birds:			
Rallis limicola	Virginia Rail		
Birds of Prey:			
Buteo jamaicensis	Red-tailed Hawk		
Nonpasserine Land Birds:			
Ceryle alcyon	Belted Kingfisher		
Picoides villosus	Hairy Woodpecker		
Colaptes auratus	Northern Flicker		
Drycopus pileatus	Pileated Woodpecker		
Passerine Birds:			
Tachycineta thalassina	Violet-green Swallow		
Hirundo rustica	Barn Swallow		
Cuanoatta stelleri	Steller's Jay		
Parvus atricapilus	Black-capped Chickadee		
Psaltriparus minimus	Bushtit		
Sitta canadensis	Red-breasted Nuthatch		
Thryomanes bewickii	Bewick's Wren		
Troglodytes aedon	House Wren		
Troglodytes troglodytes	Winter Wren		
Regulus satrapa	Golden-crowned Kinglet		
Turdus migratorius	American Robin		
Bombycilla cedrorum	Cedar Waxwing		
Dendroica petechia	Yellow Warbler		
Geothylpis trichas	Yellow-Throat		
Melospiza melodia	Song Sparrow		
Piranga ludoviciana	Western Tanager		
Pipilo erythrophthalmus	Rufous-sided Towhee		
FISH			
Cottus sp.	Sculpin		
Gasterosteus sp.	Stickleback		
Oncorhynchus clarki	Cutthroat Trout		
Oncorhynchus kisutch	Coho Salmon		
Oncorhynchus mykiss	Steelhead		
Oncorhynchus nerka	Kokanee		
Oncorhynchus nerka	Sockeye		
Oncorhynchus tshawytscha	Chinook		

Notes:
Bold indicates non-native species.
+ Indicates native status undetermined.
This species list only includes species observed during late summer/early fall `97 site visits and is not exhaustive; other species are expected to occur at the Natural Area.

Fish
Cold Creek and Daniels Creek/Cottage Lake Creek provide spawning and rearing habitat for chinook, coho, steelhead, and cutthroat trout. Tributaries to these creeks also may provide rearing habitat. The high proportion of pools, overhanging banks and logs, as well as the cold temperatures create ideal rearing habitat for salmonids in Cold Creek and make it a very important part of the Bear Creek system. Other native fish species observed in these streams are sculpin and stickleback. Crappie, bass, perch, trout, and other species have been caught in Bassett Pond, which was stocked in the past. Large concentrations of chinook and sockeye spawn in Cottage Lake Creek and Bear Creek. Chinook spawning occurs up to the outlet of Cottage Lake Creek and sockeye spawning generally stops in the forested riparian zone just south of NE 165th Street. Kokanee, a non-anadromous sockeye, also lives and spawns in the Cottage Lake Creek/Bear Creek system.

Amphibians and Reptiles
As part of a King County volunteer monitoring program, amphibians were observed on site during the spring of 1996. Pacific chorus frog and western toad were observed in wetlands near Cottage Lake. Other native amphibian species expected within the wetland complex include red-legged frog, long-toed salamander, northwestern salamander, Ensatina, and rough-skinned newt. The predatory, non-native bullfrog was also observed in wetlands contiguous with Daniels Creek. This latter species preys on juvenile salmonids and native amphibians, among a multitude of other species.

Other Freshwater Fauna
One freshwater mussel was observed in Daniels Creek near the Mary Cash Farm. The extent of additional populations is not known. A large population of freshwater mussels occurs in Cottage Lake Creek.

Birds
Expansive willow and spiraea thickets within the Natural Area provide habitat for a variety of bird species, including Yellow Throat, Yellow Warbler, Song Sparrow and Marsh Wren, among others. Barn and Violet-green Swallow can be found around Basset Pond during the breeding season and a variety of waterfowl use the pond during the winter months. Forest birds often seen at the site include Pileated Woodpecker, Black-capped chickadee, Winter Wren, Golden Crown Kinglet, Steller's Jay, and American Robin.

Mammals
River otter, beaver, black-tailed deer, bobcat, coyote, black bear, raccoon, cottontail rabbit, and Douglas squirrel sign were observed in the Cold Creek area. Healthy populations of small mammals are also expected to occur at the Natural Area.

Future Wildlife
Over several decades, the site's vegetation may naturally change as conifers grow to dominance, creating better habitat for forest-dwelling and aquatic species. However, the biological and regional significance of the Natural Area is tied to the condition of the larger surrounding landscape. Much of the wildlife using the Natural Area also frequent neighboring lands, and therefore changes in land use on adjacent parcels will likely result in changes to the wildlife species inhabiting the Natural Area.

LAND USE

Historic Use

Regional Cultural History
Logging first began in this part of King County in the late 1800s. At that time the surrounding hills were laced with saw mills and small pony engines carried the logs to larger rail lines to be shipped into Seattle. Once the land had been cleared of its timber in the late 1890s, families began moving in to settle the area, building homes and farming the land.

The original road through the area came from Woodinville, roughly following 171st/175th Street NE, and passed along what is now Bassett Pond before connecting to Avondale Road. A stage line following this route brought passengers out from Seattle. From Avondale the road went on to Cherry Valley, passing under a "veritable tunnel of trees", as one old-timer recalls. With the construction of the Woodinville-Duvall Road in the 1930s this area began to open up to tourists able to drive out to the country. "Motoring to Cottage Lake" became a popular trip from Seattle and visitors flocked to the area. Cabins provided accommodation to families that came to spend summer vacations swimming, boating, and fishing at this lake with its accessible shoreline.

One of the first recreational camps here was begun in the late 1920s when "Camp Comfort" was built at the south end of Cottage Lake as a destination tourist attraction. In the 1930s it was rivaled by the Erickson Lake Resort on the north side of the lake, which was purchased by Norm Fragner in the 1940s. Norm capitalized on the popularity of the spot, adding improvements over time and changing the name to Norm's Resort, but retaining the basic vacation/recreational aspects of the camp. This camp site was obtained by King County with Open Space Bond funds in 1990 and has since been developed as Cottage Lake Park.

During the first half of the 20th century, low-lying land west of Cottage Lake was farmed and grazed by dairy cows. By about mid-century wetlands further west of the lake were partially drained using tiles and ditches, and blueberry bushes were planted. About the same time peat mining was started in the area of Bassett Pond and the pond itself resulted from the digging. A one-lane gravel road connecting dry land to the peat mining operation was built, along with a bridge over Cold Creek, which does not exist today.

The area around Basset Pond was once groomed to function as a three or four-hole golf course. Numerous trees (over 20,000) were planted at Bassett Pond Park and the Natural Area to the east of Bassett Pond beginning in 1962. Flowering plum, birch, and spruce were planted and many of the latter were harvested for Christmas trees.

Current Use

Mary Cash Farm

The main focus of the area is to provide educational, interpretive opportunities. Currently, natural history programs are offered for groups and the general public. A parking area for approximately 19 cars and two buses was recently completed. The former chicken coop/garage has been recently renovated as an interpretive/picnic shelter with a storage area. A small picnic area has also been developed immediately south of the shelter. The old barn west of the renovated chicken coop has been re-roofed but is not currently being used. A small foot trail heads south from the parking lot, across a bridge over Daniels Creek, through deciduous forested wetlands, and across a second bridge over a drainage ditch before abutting the old blueberry area. Hikers use this trail as well as the trail through the Bassett Pond site.

Productive bushes are still found on about a quarter of the old blueberry farm area. The northern, southeastern, and western groves of blueberry bushes are overgrown with blackberries, salmonberry, reed canary grass, and spiraea. Blueberry bushes have been a destination spot for picking during the early fall, although limited parking precludes large numbers of visitors.

An overgrown foot trail leads from NE 165th Street to Bassett Pond and the southwest corner of the Pheasant Ridge Estates open space and development. This trail passes through dense spiraea west and north of Bassett Pond, and used to span Cold Creek via a wooden footbridge which has now disintegrated. From there, it continues on an old roadbed through a meadow of reed canarygrass. The entire area is very wet and overgrown. Bassett Pond is used for birdwatching and limited fishing, although currently only roadside parking is available.

Site Access

Access to the greater part of the Natural Area is limited due to the lack of parking and destination points. Aside from the small parking lot at the Mary Cash Farm, and off-road parking at Bassett Pond at the south end, there is little public parking. Informal trails pass through portions of the Natural Area but other than the picnic area and

interpretive shelter at Mary Cash, there are no other developed facilities. Permanently saturated or inundated soils and/or numerous drainage ditches preclude easy walking on much of the central and southern portions of the site.

Part III - SITE MANAGEMENT RECOMMENDATIONS

Land Use Classification/Park Use Areas

Parks and open spaces in the King County park system are classified according to a three-level system. The first level distinguishes sites as local or regional, the second level specifies the site's primary purpose (natural area, active recreation, passive recreation, multi-use, trail or special purpose), and the third defines park use areas within the site (natural areas, active recreation areas, passive recreation areas, staging areas, and special management areas). Due to the nature of the site and purpose and goals of the Waterways 2000 program, the Cold Creek site is classified as a *Natural Area* of *local* significance, with *natural areas*, *passive recreation areas, special management areas* and potentially *staging areas* within its boundaries. *Natural Areas* support little development and limited public access, with access via footpaths and interpretive and directional signage as necessary. *Passive recreation areas* allow for informal activities such as interpretive programs and passive water access. S*pecial management areas* would be focused on habitat protection, in protected areas not meant for public access. *Staging areas* are those which allow for parking, sanicans, trash receptacles and/or other maintenance facilities. Park use areas onsite are generally described as follows:

Natural areas: The entire site, excluding the passive recreation areas and special management areas.

Passive Recreation Areas: Potentially portions of the site at the uplands west of Bassett Pond and the old blueberry farm area south of Mary Cash Farm. These areas may be suitable for passive uses, such as picnicking, viewing, and or other limited uses.

Special Management Areas: Protected sensitive areas and their buffers including wetlands, streams, and perennial tributaries. Much of the Natural Area is comprised of sensitive areas.

Staging areas: Mary Cash Farm will serve the Natural Area by providing limited parking, an interpretive/picnic shelter, small picnic area, trash receptacles, and/or other facilities appropriate to interpretive uses. These elements were identified in a Master Plan prepared previously for the Mary Cash Farm (then referred to as "Daniels Creek Park"). The upland portion of the old blueberry farm area adjacent to the access road may potentially be appropriate for a staging area with view opportunities, but no public parking. Another staging area may be the upland portion W of Bassett Pond (formerly an orchard area), which provides a good view of the lower-lying wetlands. Here, a small (three car) parking pullout along 165th would help eliminate parking on adjacent private roads and unsafe parking along the narrow roadway shoulder.

Using these classifications, planning and design recommendations are detailed in the following pages. General elements are noted on the site management map (*Figure 5*).

Planning Elements and Recommendations

Site Uses

The preservation, protection, enhancement and interpretation of fish and wildlife habitat onsite (and therefore helping to maintain the downstream environment) are the primary objectives in planning for the Natural Area. The provision of appropriate, low-impact public access is the secondary objective. Following are recommended public uses for this site:

- Nature observation
- Hiking on maintained footpaths only (pets must be on leash, no equestrian use)

- Photography
- Interpretive programming (cultural history, wetlands, and wildlife)
- Wetland, stream, and upland restoration projects
- Picnicking
- Wildlife enhancement projects

Separation of Uses

In order to conserve resources at the Natural Area and to recognize existing public use of the site, emphasis should be placed on redirecting and minimizing impacts to sensitive areas. As much of the site is within sensitive areas, some public access may be allowed within small "use areas" in order to direct use and prevent impacts to the rest of the Natural Area. The retention, rehabilitation and enhancement of the area's natural resources is critical to effective long-term site management, as is sensitively-sited, low-impact public uses such as interpretation and education. Appropriately sited barriers will likely be necessary to prevent unwanted uses accessing certain portions of the Natural Area from Mary Cash Farm and Bassett Pond, as well as the old blueberry farm area.

Special Management Areas

Habitat Preservation Areas

Management of the Natural Area should focus on the protection of existing streams and wetlands, with emphasis on restoration of degraded elements. Long-term ecological monitoring of some key species—amphibians, birds, fish, and invasive plants—should be undertaken. Information on amphibians has been collected by volunteers at Bassett Pond and Cottage Lake in recent years and a continuation of that KC DNR program will provide information on the quality of habitat on these sites. The following general design and planning elements are recommended for the most sensitive portions of the Natural Area:

- Limit access through the wetlands and streams by revegetating social trails and old roads.
- Limit new footpaths to avoid areas that currently see little human use.
- Maintain and enhance the condition of wetland and riparian buffers onsite.
- Comply with all regulations and restrictions which may result from ESA listings of salmonids in the management of the Natural Area.

Passive Recreation Areas

The Cold Creek Natural Area was purchased largely for its conservation significance, but also for its passive recreational and educational opportunities. Appropriately directed public access and appreciation of the resources at the Natural Area will be important for future support of conservation efforts and site stewardship.

Internal trails and view corridors

Low-impact, pedestrian-only footpaths could help balance the necessity of protecting the largest portion of sensitive areas while continuing to allow limited public access. Siting of access points, trails, and interpretive areas should take into account the environmental conditions (streams, wetlands, etc.) of the site. Access to the most environmentally sensitive areas, the forested wetlands, the creeks and their tributaries, should be limited or discouraged altogether. Footpaths have recently been added to the Mary Cash Farm to provide pedestrian and bicycle access to the site and to allow for internal connections throughout the picnic area and to the interpretive shelter. Boardwalks, which could provide more environmentally sensitive access to Daniels Creek and the wetland areas

south of the Farm Site have been proposed (but not funded). Such boardwalks would allow public viewing and improved interpretive opportunities of the Natural Area. Additional formal footpaths at the Natural Area could include:

- Looped footpath from the viewing area west of the access road around the restored blueberry area.
- Mowed footpath connecting the Mary Cash Farm to the access road on the eastern side of the Natural Area. This would provide access to the rest of the Natural Area without requiring visitors to walk along the busy Woodinville-Duvall Road.
- Footpath from upper Bassett viewing area to existing footpath to pond.

Viewing areas should be provided near the uplands in southwestern corner of the Natural Area near Bassett Pond adjacent to the proposed small parking pull-out area and at the upland portion of the old blueberry farm between the access road and restored blueberry patch *(see Figures 6 & 7).*

Interpretation

Interpretive opportunities could highlight the importance of the wetland system at Cold Creek to wildlife habitat and water quality in the larger Bear Creek system. Historic changes to the habitat environs could be included in this program. Design and installation of interpretive signs would be to King County interpretive standards. The following are potential interpretive locations at the Natural Area:

- Mary Cash Farm, interpretation of creek, wetland system and historic farm use
- Upland area of Bassett Pond, interpretation of wetland system and historic change
- Old blueberry farm, interpretation of wetland system, historic change and agriculture

Parking

Aside from the existing parking which is available at the Mary Cash Farm (off the Woodinville-Duvall Road) there is little suitable area for parking to accommodate the Natural Area. However, a small parking pullout for three cars west of Bassett Pond has been proposed if determined to be feasible *(see Figure 7).*

Site-wide Issues

Revegetation/Habitat restoration

In the future, this Natural Area should continue to function as an integral piece of natural habitat within the Bear Creek system. Efforts should be made to reduce invasive species from wetlands and former fields as well as from stream channels and ditches. Given opportunity and assistance, native plants should begin to reestablish themselves onsite. Another focus will be on the restoration of disturbed and/or monotypic wetland habitats and stream corridors. Following are recommended restoration projects:

- Direct succession towards a native, forested wetland community by planting native coniferous and deciduous trees in non-blueberry areas of the old blueberry farm.
- Provide more structural diversity through a currently homogeneous area (primarily reed grass and spiraea) along Cold Creek to the north and east of the Bassett Pond area by planting native conifers and deciduous trees and shrubs.
- Create greater diversity in the peat soils around Bassett Pond by planting appropriate native plant species.
- Plant Sitka spruce and western red cedar saplings in the understory of the forested wetlands near Daniels Creek to facilitate succession.
- Evaluate instream habitat and restoration opportunities for salmonids in Cold Creek, Daniels Creek, and agricultural ditches. Ditch assessment and implications to increased salmonid utilization.
- Maintain a limited portion of the farm in blueberry production. Select and implement restoration opportunities on the portions of the old blueberry farm that will not be kept in agricultural use.
- Create a vegetation buffer between the Natural Area at the old blueberry farm and adjacent private landowner

property at the end of the access road.
- Eradicate purple loosestrife from any portion of the Natural Area to which it may spread—this is a Class B weed mandated for control by King County *(see Appendix A)*.
- Focus control of common invasives such as blackberries, yellow flag iris and bittersweet nightshade on "satellite" populations in order to prevent their spread into unaffected areas.

Boundary Delineation – Survey/Signage/Fencing

Fencing has been recently added to portions of the north boundary of the Mary Cash Farm to protect wetlands within the site. Additional boundary issues include:
- Survey and permanently mark property boundary to the east of Bassett Pond Park along the southeastern edge.
- Verify and permanently mark property boundaries within mixed-forested wetland along Cold Creek.

Maintenance/Staffing
- Budget for appropriate County maintenance staff to ensure that parking areas, the interpretive/picnic shelter, and picnic area are maintained, garbage is collected, and property condition is monitored.
- Maintain and enhance community volunteer stewardship in maintenance and monitoring of the site.
- Maintain pedestrian-only footpaths to King County standards.
- Control invading plant species like blackberries, spiraea, and salmonberry by selective cutting in area of limited blueberry maintenance.

Park Furnishings

Park furnishings will be limited at the Natural Area, as distinct from a more traditional active or passive park, with the exception of the staging area at the Mary Cash Farm (shelter, picnic area and parking). Only those improvements that serve to preserve and protect natural resources onsite and appropriately direct public use (such as footpaths and boardwalks if necessary) should be considered for the remaining portions of the site. Parking areas should be gated and locked at night to limit access to limit vandalism, inappropriate use of the site and for safety reasons.

Site Safety
- Discourage uses that could present unsafe site conditions such as access to streambanks, riparian corridors, wetland areas and former agricultural ditches.
- Remove or replace unsafe bridges as needed.
- Remove unnecessary fencing as needed.

Recommended Monitoring

To monitor the long-term health of the Natural Area over time, the following activities are recommended, as feasible:
- Assess the effect of the old blueberry farm's drainage ditches on the quality and quantity of water in Cold Creek as well as the impact these have on aquatic life.
- Control current and future infestations of non-native and invasive plant species, using existing KC DNR monitoring and removal programs. Monitor access corridors (trails, roads) for weed establishment and remove as feasible (see *Part IV – Appendix A*).
- Utilize existing KC DNR monitoring projects for long-term collection of resource data on fish, amphibians, native plants, and other wildlife species on site.

Community Stewardship
- Continue and support Water Tenders' "adoption" of the Cold Creek Natural Area.
- Work with neighbors to retain existing native vegetation along Cold Creek in the mixed-forested wetland.
- Encourage and expand cooperation with neighbors, local landowners, civic and environmental organizations, and local schools. Utilize a variety of programs, such as the King County Department of Natural Resource "Habitat

Partners", and the King County Department of Transportation "Adopt-A-Road", and others to encourage and manage volunteer stewardship efforts. Projects could include invasive weed pulls, litter collection, and amphibian monitoring (*see "Recommended Monitoring"*).

Future Acquisitions

The Cold Creek Natural Area is a key property in the Bear Creek drainage system. Continuing the Waterways 2000 process of working with neighboring property owners and applying a variety of approaches, including fee simple acquisition, purchase of conservation easements, enrollment in the County's current use taxation programs (PBRS) could add buffers to the Natural Area and improve linkages between protected areas. Maintaining and adding to forested corridors connecting the Natural Area to other conservation and open space lands may help to offset the negative effects of fragmentation that inevitably follows development. The Cottage Lake Creek drainage as well as that of Bear Creek is becoming increasingly urbanized and community-wide efforts will be critical in order to reduce impacts to fish and wildlife in the watershed.

Identifying the habitat quality of areas upstream and downstream of the Natural Area as well as the level of threat to them could be used to prioritize future acquisitions. The following areas have been identified as potential future acquisitions:

- Springs north and west of the Natural Area which are the source of Cold Creek.
- Wetlands between the southwestern corner of the Bassett Pond area and the Natural Area's forest wetlands to the north.
- Approximately 40-acre parcel south of NE 165th St. which includes wetlands and upland coniferous forest.
- Wetland areas to the northwest of the old blueberry farm and south of the Woodinville-Duvall Road.
- Property to the east of the Mary Cash Farm and south of the Woodinville-Duvall Road where Daniels Creek flows into Cottage Lake.

Phasing and Priorities

The phasing plan establishes priorities for management activities at the Natural Area. Priorities are based on providing for public safety and resource protection and reflect items of short-term (primary) and long-term (secondary) importance. Implementation of recommendations will be funded by annual King County Capital Improvement (CIP) funds, grants, and other applicable funding mechanisms. Capital improvements compete countywide for funding during the annual budget adoption process; therefore in any given year, priority actions may not be funded due to more urgent projects. Implementation will be accomplished by either outside contractors, in-house (KC) crews, or by maintenance and/or operational crews and volunteers.

Phasing for **capital improvement projects** is recommended as follows.

<u>Primary Priority</u>

- **Social trail removal** and **revegetation** in riparian, wetland areas and upland areas
- **King County signage** at access points (4)
- **Interpretive signage** at appropriate locations
- **Installation of small parking pull-out near Bassett Pond**

<u>Secondary Priority</u>

- Native conifer/shrub underplantings within wetland, riparian and upland areas as appropriate

Part IV – Appendix A

Table 3: Priority Invasive Plant Species at Cold Creek Natural Area

SCIENTIFIC NAME	COMMON NAME
Hedera helix	English Ivy
Iris pseudocorus	Yellow Iris
Phalaris arundinacea	Reed Canarygrass
Polygonum cuspidatum	Japanese Knotweed
Rubus discolor	Himalayan Blackberry
Rubus laciniatus	Evergreen Blackberry
Solanum dulcamara	Bittersweet Nightshade

Table 4: 1996 Washington State Noxious Weed List/Class A Weeds
Control is mandatory statewide.

SCIENTIFIC NAME	COMMON NAME
Abutilon theophrasti	Velvetleaf
Carduus pycnocephalus	Italian Thistle
Carduus tenuiflorus	Slenderflower Thistle
Centaurea calcitrapa	Purple Starthistle
Centaurea macrocephala	Bighead Knapweed
Centaurea nigrescens	Vochin Knapweed
Crupina vulgaris	Common Crupina
Helianthus ciliaris	Texas Blueweed
Heracleum mantegazzianum	Giant Hogweed
Hibiscus trionum	Venice Mallow
Hieracium pilosella	Mouseear Hawkweed
Hydrilla verticillata	Hydrilla
Isatis tinctoria	Dyers Woad
Mirabilis nyctaginea	Wild Four O'clock
Peganum harmala	Peganum
Proboscidea louisianica	Unicorn-plant
Salvia aethiopis	Mediterranean Sage
Silybum marianum	Milk Thistle
Solanum elaeagnifolium	Silverleaf Nightshade
Solanum rostratum	Buffalobur
Sorghum halepense	Johnsongrass
Spartina patens	Salt Meadow Cordgrass
Zygophyllum fabago	Syrlan Bean-caper

Table 5: 1996 Washington State Noxious Weed List/Class B Weeds
Control is mandatory in all or parts of King County.

SCIENTIFIC NAME	COMMON NAME
Acroptilon repens	Russian Knapweed
Alhagi maurorum	Camelthorn
Amorpha fruticosa	Indigobush
Anchusa arvensis	Annual Bugloss
Anchusa officinalis	Common Bugloss
Cabomba caroliniana	Fanwort
Carduus acanthoides, C. nutans	Plumeless and Musk Thistle
Centaurea biebersteinii, C. diffusa, C. jacea. C. nigra, C. jacea x nigra	Spotted, Diffuse, Brown, Black, & Meadow Knapweed
Cenchrus longispinus	Longspine Sandbur
Centaurea solstitaialis	Yellow Starthistle
Chondrilla juncea	Rush Skeletonweed
Cyperus esculentus	Yellow Nutsedge
Echium vulgare	Blueweed
Euphorbia esula	Leafy Spurge
Hieracium caespitosum	Yellow Hawkweed
Lamium hybridum	Hybrid Deadnettle
Lepidium latifolium	Perennial Pepperweed
Lepyrodiclis holosteoides	Lepyrodiclis
Linaria dalmatica ssp. dalmatica	Dalmatian Toadflax
Lythrum salicaria	Purple Loosestrife
Myriophyllum aquaticum	Parrotfeather
Onopordum acanthium	Scotch Thistle
Picris hieracioides	Hawkweed Oxtongue
Potentilla recta	Sulfur Cinquefoil
Rorippa austriaca	Austrian Fieldcress
Senecio jacobaea	Tansy Ragwort
Sonchus arvensis spp. arvensis	Perennial Sowthistle
Spartina alterniflora, S. anglica	Smooth, Common Cordgrass
Sphaerophysa salsula	Swainsonpea
Torilis arvensis	Hedgeparsley
Tribulus terrestris	Puncturevine
Ulex eropaeus	Gorse

Table 6: 1997 Washington State Noxious Weed List/Class C Weeds Control and containment strongly encouraged.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
Aegilops cylindrica	Jointed Goatgrass	*Hyoscyamus niger*	Black Henbane
Anthriscus sylvestris	Wild Chervil	*Hypericum perforatum*	Common St. Johnswort
Artemisia absinthium	Absinth Wormwood	*Linaria vulgaris*	Yellow Toadflax
Cardaria pubescens	Hairy Whitetop	*Matricaria perforata*	Scentless Mayweed
Chaenorrhinum minus	Dwarf Snapdragon	*Phalaris arundinacea*	Reed Canarygrass
Cirsium arvense	Canada Thistle	*Polygonum cuspidatum*	Japanese Knotweed
Cirsium vulgare	Bull Thistle	*Secale cereale*	Cereal Rye
Conium maculatum	Poison-hemlock	*Silene latifolia* ssp. *alba*	White Cockle
Convolvulus arvensis	Field Bindweed	Xanthium spinosum	Spiny Cocklebur
Cuscuta approximata	Soothseed Alfalfa Dodder	*Cardaria draba*	Hoary Cress
Cynoglossum officinale	Houndstongue	*Tanacetum vulgare*	Common Tansy
Daucus carota	Wild Carrot	*Solanum dulcamara*	Bitter Nightshade
Eruca vesicaria ssp. *sativa*	Garden Rocket	*Tamarix* spp.	Saltcedar
Gypsopphila paniculata	Babysbreath	*Verbascum thapsus*	Common Mullein
Hemizonia pungens	Spikeweed		

Appendix B—Summary of Public Process

July 2, 1999
Questionnaire sent to residents within 1000 feet of the combined Cold Creek/Mary Cash Farm (Daniels Creek)/Bassett Pond area as well as local organizations and interested parties. Mailing went to approximately 370 citizens and responses were requested by July 23rd. WaterTenders included the questionnaire in its newsletter mailing to members in the 98072 area code.

January 11, 2000
First public meeting held at Woodinville Library to present existing information on the site (natural resources/existing uses), results of the questionnaire, and invite input on the future of the natural area. Comments requested by February 2, 2000.

September 19, 2000
Second public meeting held at Woodinville Library to present the draft Site Management Plan created from inventory/analysis of site conditions, stewardship recommendations, and public comments. Potential site restoration projects, appropriate public use and interpretive opportunities were also discussed. Comments were requested by October 5, 2000.

November 18, 2000
Meeting between King County (DCFM, DNR, and Parks) and the community (Water Tenders, Upper Bear Creek Council Executive Group, on Daniels/Mary Cash Plan/Capital Improvement Project. Meeting held on site.

November 28, 2000
Upper Bear Creek Council Community Public Meeting held at the Woodinville Water District Main Office. One agenda item for the meeting focused on the Daniels/Mary Cash Plan/Capital Improvement Project.

December 11, 2000
Public meeting held by King County Parks on the Daniels/Mary Cash Plan/Capital Improvement Project and placing that plan in perspective with the Cold Creek Site Management Plan. Comments on the Daniels/Mary Cash Plan were requested by January 11, 2000.

February 27, 2001
Upper Bear Creek Council Public Meeting held at the Woodinville Water District Main Office. One item of the agenda for the meeting focused on an update of the Daniels/Mary Cash Plan/Capital Improvement Project (public comment summary, final recommendations).

March 28, 2001
Councilmember Louise Miller held a meeting in the District Office Service Center to discuss the final recommendations for the Cold Creek Natural Area and Daniels Creek Park/Mary Cash Farm. Representatives from King County Parks, DNR, Water Tenders and the Upper Bear Creek Community Council participated.

May 8, 2001
Meeting with KC Parks and KC DNR staff, Water Tenders, Upper Bear Creek Community Council and neighbors of Bassett Pond Park to discuss:

- potential off-street parking at Bassett Pond
- a mowed pedestrian path between Mary Cash Farm and the Cold Creek Access Road
- a portion of Cold Creek Natural Area where blueberries will be restored/maintained
- an area west of the maintained blueberries and east of the access road which would provide view corridors and passive uses (informal picnicking, bird watching, etc.)
- other potential restoration opportunities (reforestation).

June 26, 2001
Parks staff provided a status report during the Upper Bear Creek Community Council Public on the status of construction at Daniels/Mary Cash Farm. Meeting held at the Woodinville Water District Main Office.

July 24, 2001
Upper Bear Creek Community Council Public Meeting held at the Woodinville Water District Main Office. Meeting focused on the recommendations for the Final Site Management Plan for Cold Creek Natural Area, which will formally include the Bassett Pond and Mary Cash Farm properties.