

Ricardi Reach and Jones Reach Site Management Guidelines:

Ricardi Reach Natural Area

Jones Reach Natural Area

Cedar Grove Natural Area

February 2004



King County

Department of Natural Resources and Parks

Water and Land Resources Division

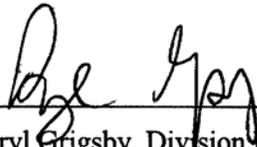
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Daryl Grigsby, Division Director

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Ricardi Reach and Jones Reach Site Management Guidelines

Summary

Site Description

This document provides property information and management recommendations for three King County Ecological Lands: Ricardi Reach Natural Area, Cedar Grove Natural Area, and Jones Reach Natural Area. These properties are located in the Ricardi and Jones Reaches of the Lower Cedar River, as identified through the Cedar River Legacy program which directs public conservation efforts in the Lower Cedar River. Ricardi Reach is located between RM 7.3 and RM 7.7; Jones Reach is located between RM 8.5 and RM 9.3. Due to adjacency of the two river reaches and the Natural Areas, this plan is written to address the two river reaches together.

These three Natural Areas are King County Department of Natural Resources and Parks (DNRP) Ecological Lands. Ecological Lands are managed for the protection of their ecological value, with appropriate public access.

The sites are located approximately 1½ miles east of Renton's urban growth boundary, and are bounded by the Cedar River Trail and SR 169 to the south. The locations of the three sites are as follows:

- Ricardi Reach Natural Area is 7.45 acres total and consists of three contiguous parcels on the left bank (facing downstream) of the Cedar River between RM 7.7 and RM 7.4. The site is bounded by the Cedar River Trail to the south and the Cedar River to the north. A mobile home park lies just west of the site.
- Cedar Grove Natural Area contains one 73-acre parcel of land on the left bank of the river between RM 9.3 and 7.8, also bounded by the Cedar River Trail to the south and meander bends of the Cedar River to the north.
- Jones Reach Natural Area contains just under 3 acres of land on the right bank, located at RM 8.9. Jones Reach Natural Area is bounded by Jones road to the northeast and the Cedar River to the southwest.

The parcel contained in Jones Road Natural Area is on the extremely steep (40% slopes in some places) north valley wall along the Cedar River. Seeps and springs in this vicinity have contributed to historic slumping and landsliding. The Cedar River Trail, the former railroad grade, limits the extent of river meander to the south and creates an abrupt linear boundary on the south edges. The 100-year floodplain extends across both of the Natural Areas on the south side of the river. The Cedar Grove Natural Area peninsula was identified in the Lower Cedar Basin Action Plan as a severe channel migration hazard area. This peninsula contains multiple side channels which have conveyed river flow during times of high water.

Ricardi Reach Natural Area contains a 6-acre forested wetland along the Cedar River, including a side channel off of the mainstem. Cedar Grove Natural Area contains a 30-acre forested/scrub-shrub wetland. These parcels all contain typical riparian red alder and black cottonwood forest, with a smaller proportion of coniferous trees and a dense shrub understory. While there is a significant component of native shrubs in the understory, there is also a presence of non-native species including Japanese knotweed, Himalayan blackberry, and butterfly bush.

Ricardi Reach Natural Area and Cedar Grove Natural Area contain nearly 1.25 miles of contiguous forested habitat along the Cedar River. The riparian forest and associated wetlands provide habitat for a variety of wildlife and bird species. The off-channel wetlands do not appear to have connection to the Cedar River for much of the year, limiting their use by salmonids.

Public Use

Unmapped wetlands and dense shrubs limit ready access through most of the Ricardi Reach Natural Area and Cedar Grove Natural Area parcels from the Cedar River Trail. Only occasional and informal access occurs on most of these parcels.

There is one main access point on the west edge of Cedar Grove Natural Area, where a short informal trail extends from the Cedar River Trail to the water. This trail experiences regular use by pedestrians to access the river.

There is no legal parking at any of the sites. People park on the shoulder of SR 169 just south of Cedar Grove Natural Area, although parking at this area is likely in violation of Washington State Department of Transportation regulations. The sites have ready access from the Cedar River Trail.

Jones Reach Natural Area experiences no known public use. The steep slopes make access hazardous, and the road shoulder provides no safe parking.

Management Objectives and Recommendations

The goals for all King County Ecological Lands are to conserve and enhance ecological value, and accommodate appropriate public use that does not harm the ecological resources on site. The following are management recommendations that are designed to support these goals. Text follows each recommendation explaining how that recommendation applies at the site.

Objective: Maintain ecological integrity of the site

Recommendation: Ensure that management and public access support the regional ecological value of the sites

Decisions about site management and public access should consider the regional significance of the large tracts of riparian forest and off-channel wetlands at the site. Public access should be focused on the short river access trail at the west edge of Cedar Grove Natural Area; dense vegetation, topography, and wetlands limit access to most other portions of these sites. This overarching recommendation is carried out through the various recommendations below.

Objective: Develop long term ecologically based protection and restoration actions

Recommendation: Perform baseline inventories and assessments

Complete baseline inventories and assessment of basic ecological conditions and physical processes. Staff with appropriate expertise (e.g., ecologists, biologists, and engineers) should perform this work. Existing documents, studies, and staff research may contribute substantial inventory and assessment information about the sites.

Recommendation: Develop recommendations for site restoration from inventory information

Use inventory and assessment information to develop projects to achieve a set of goals and objectives consistent with those identified for King County Ecological Lands.

The Lower Cedar Basin Plan, Flood Hazard Reduction Plan, and WRIA 8 Chinook Salmon Conservation plan make a number of management recommendations in the vicinity of the site that may be considered for future recommendations. These general proposals are aimed at multiple interests (flood hazard reduction, habitat quality and salmonid health, and water quality and quantity) and may or may not be in accordance with ecological land management goals. These recommendations should be considered when developing any future projects for the site.

Objective: Contain spread of invasive vegetation

Recommendation: Monitor and control invasive vegetation

Park staff should monitor and contain the spread of noxious and invasive plant species that are present at the sites, particularly in those areas where planting projects have occurred. Control is primarily through manual removal of plants by Park staff or organized volunteer groups.

Areas actively restored through a capital improvement project should be rigorously monitored and maintained for at least 5 years following construction. The maintenance and monitoring plan should be designed as part of the project.

Objective: Protect the site from inappropriate public uses

Recommendation: Control litter/dumping and encroachment activities

Park staff should monitor the site for encroachment, dumping, and trash and respond as necessary to maintain a clean and safe property. Monitoring should occur at least monthly.

Park staff should consider installing litter/dumping policy signs on the property if litter activity increases.

Objective: Allow current level of passive recreation opportunities at the sites

Recommendation: Monitor public access

Park staff should note changes in visitor numbers and types of recreational activities at these sites, and observe any noticeable visitor impacts on the ecological values of the site. This information should be reported annually to King County Natural Resource Lands Management Staff responsible for updating site management guidelines.

The current passive uses of walking and nature observation occurring at Cedar Grove Natural Area and the very limited use elsewhere in Jones Reach and Ricardi Reach should be monitored and held at current levels. This use level is appropriate given current site topography, access points, and sensitive resources. If informal trails proliferate in areas that are erosive or will negatively impact the wetland or river, Park staff should close down those trails.

Objective: Coordinate management of county-owned sites

Recommendation: Pursue managing all county-owned parcels in Ricardi Reach within one section

WLRD management should discuss managing all King County-owned parcels within a reach within one section. Currently lands in Ricardi Reach are managed by NRL, FHRS, and Roads. Discussion should be initiated within WLRD management regarding NRL and FHRS properties. Further discussion with King County Roads may be necessary to coordinate management between departments.

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Ricardi Reach and Jones Reach Site Management Guidelines

Introduction

The properties described in this document include sites within the Ricardi and the Jones Reaches of the Lower Cedar River. The extents of these reaches were identified through the Cedar River Legacy program, which directs public conservation efforts in the Lower Cedar River. Ricardi Reach is located between RM 7.3 and RM 7.7; Jones Reach is located between RM 8.5 and RM 9.3.

Three areas of King County Department of Natural Resources and Parks (DNRP) Ecological Lands, consisting of several parcels, are located within these reaches: Ricardi Reach Natural Area, Cedar Grove Natural Area, and Jones Reach Natural Area. Ecological Lands are a category of Water and Land Resources Division (WLRD) properties managed for the protection of their ecological value. Appropriate public access and interpretive opportunities are accommodated on these sites where they do not harm the ecological value of the site.

This document provides general property and acquisition information, a description of existing site conditions, a chronology of recent events and management actions, and a list of management objectives and recommendations for these two sites. These site management guidelines were developed using guidance established in the King County Ecological Lands Handbook (King County 2003).

Part 1. General Property Information

Reach and Natural Area Locations

The following information describes the location of Ricardi Reach (and associated Natural Area parcels) and Jones Reach (and associated Natural Area parcels). Table 1 provides general information about the location of each Natural Area. Table 2 provides specific information for each parcel in the Natural Areas. Refer to Figure 1 for a vicinity map and to Figure 2 for a site map depicting river miles. Figure 2 shows the last four digits of parcel numbers; full parcel numbers for every parcel in each reach are provided in Appendix 1.

Ricardi Reach

The Ricardi Reach of the Cedar River is located approximately 1.5 miles east of Renton's eastern boundary. On the south side of the Cedar River, the Cedar River Trail runs along the southern boundaries of the parcels in this reach, paralleling State Route (SR) 169. On the north side of the Cedar River, the parcels in this reach are bounded by SE Jones Road on their north side.

Ricardi Reach Natural Area is 7.45 acres total and consists of three contiguous parcels on the left bank (facing downstream) of the Cedar River between RM 7.7 and RM 7.4.¹ Ricardi Reach Natural Area is located approximately 0.25 miles east along the Cedar River from the Ecological site Cavanaugh Pond Natural Area (at the 174th Ave SE/Riverbend Mobile Home Park).

Additional publicly owned lands in Ricardi Reach include three parcels on the right bank of the Cedar River, across from Ricardi Reach Natural Area, owned and managed by King County departments. Two parcels (9062 and 9054) are owned and monitored at least annually by King County Flood Hazard Reduction Services staff (Koon, J. pers. comm. 2003a). A third parcel is owned by King County Roads (9116). This parcel was acquired to fulfill mitigation requirements. Restoration work has been performed on these sites (see Part 5 below). Future acquisition may increase the acreage of public land holdings in

¹ This description of Ricardi Reach Natural Area includes land classified in Parks inventory as "Cedar Grove Natural Area." Parcel 2423059103 will be re-classified as Ricardi Reach Natural Area.

this vicinity. A restoration project involving removal of a revetment and reconnection of the river with its floodplain is currently being designed for portions of both the right and left bank in the Ricardi Reach (Faegenburg pers. comm. 2003).

Table 1. General Natural Area Information.

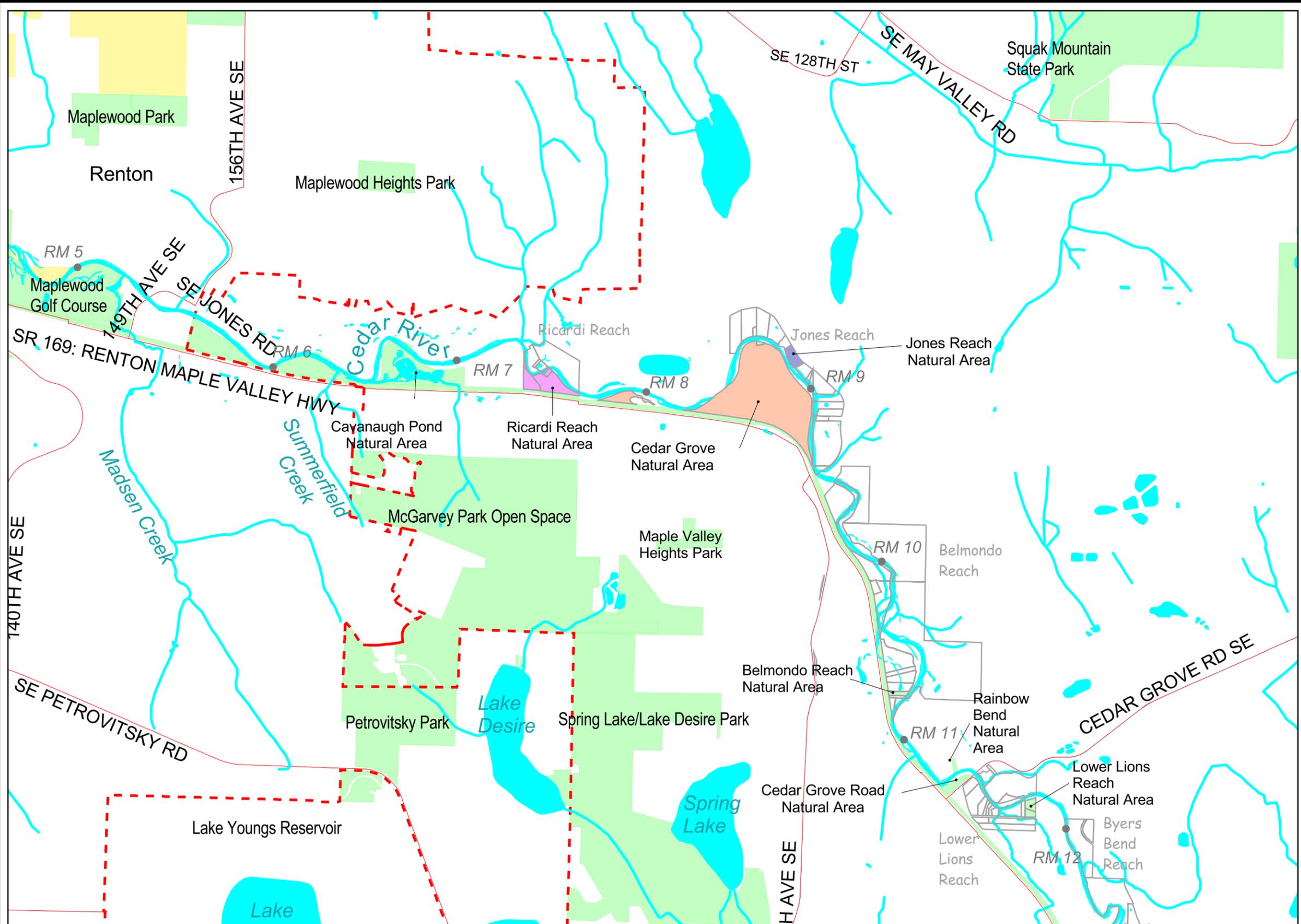
	Ricardi Reach Natural Area	Cedar Grove Natural Area	Jones Reach Natural Area
Best Available Address	North side of SR 169 just east of 174 th Ave SE	North side of SR 169 between Ricardi Reach Natural Area and SE Jones Rd.	North of 19427 SE Jones Road
Thomas Guide	657 D5	657 E5, F5 and F6	657 F5
Legal Description	Section 24, Township 23, Range 5	Section 19, Township 23, Range 6	Section 19, Township 23, Range 6
Acreage	7.45	72.77	2.95
Drainage Basin	Lower Cedar River	Lower Cedar River	Lower Cedar River
WRIA	WRIA 8	WRIA 8	WRIA 8
Council District	12	12	12
King County Sensitive Areas	Stream, wetland, FEMA floodway and 100-year floodplain, erosion	Stream, wetland, erosion, seismic, FEMA 100-year floodplain and floodway	Stream, wetland, seismic, erosion, landslide, FEMA 100-year floodplain and floodway

Table 2. Natural Area Parcel Information.

Parcel Number	Name used in this document²	Acreage³	Purchase Date	Ownership & Purchase Price	Previous Names	Zoning	Funding Source	Recording #
Ricardi Reach Natural Area								
2423059051	Ricardi Reach-9051	0.46	3/19/2002	Owned in Fee \$6,000	Knowles	RA 5	CFT; 2001 CIP	20020319001935
2423059115	Ricardi Reach 9115	4.89	12/01/1998	Owned in Fee \$1,500	Vukov	RA 5	Cedar R Legacy; OS non-bond	9812312323
2423059103	Ricardi Reach-9103	2.1	01/01/1977	Owned in Fee \$6,000	Pritchard - Cedar River Park; Cedar Grove Natural Area	RA 5	Forward Thrust	7701120493
Cedar Grove Natural Area								
1923069012	Cedar Grove-9012	72.77	12/1/1979 (best available date)	Owned in Fee N/A	Cedar Grove Natural Area-Cedar River Park (incl. Thomas, Ostler, Progressive Investment, Rainier Sportmen's Club, Crosetto)	RA 5	Forward Thrust	Various, most not available
Jones Reach Natural Area								
3570200020	Jones Reach-0020	2.95	2/27/03	Owned in Fee; \$71,500	Wagner	RA 5	CFT, SRFB	20030227001428 Deed of Right: 20030711002696

² Parcels are referred to by the reach name plus the last four digits of the ten-digit parcel number.

³ Acreage taken from King County Assessor's Office data.



Legend

- River Reach Boundaries
Lower Cedar River reach extents are designated by Cedar River Legacy Program
- River Mile Markers
- Cedar Grove Natural Area
- Ricardi Reach Natural Area
- Jones Reach Natural Area
- Public Recreation Lands
- Rivers and Lakes
- Streams
- KC Urban Growth Area
- Streets
- Municipal Boundaries



February 23, 2004
 800 0 800 1600 2400 3200 4000 Feet

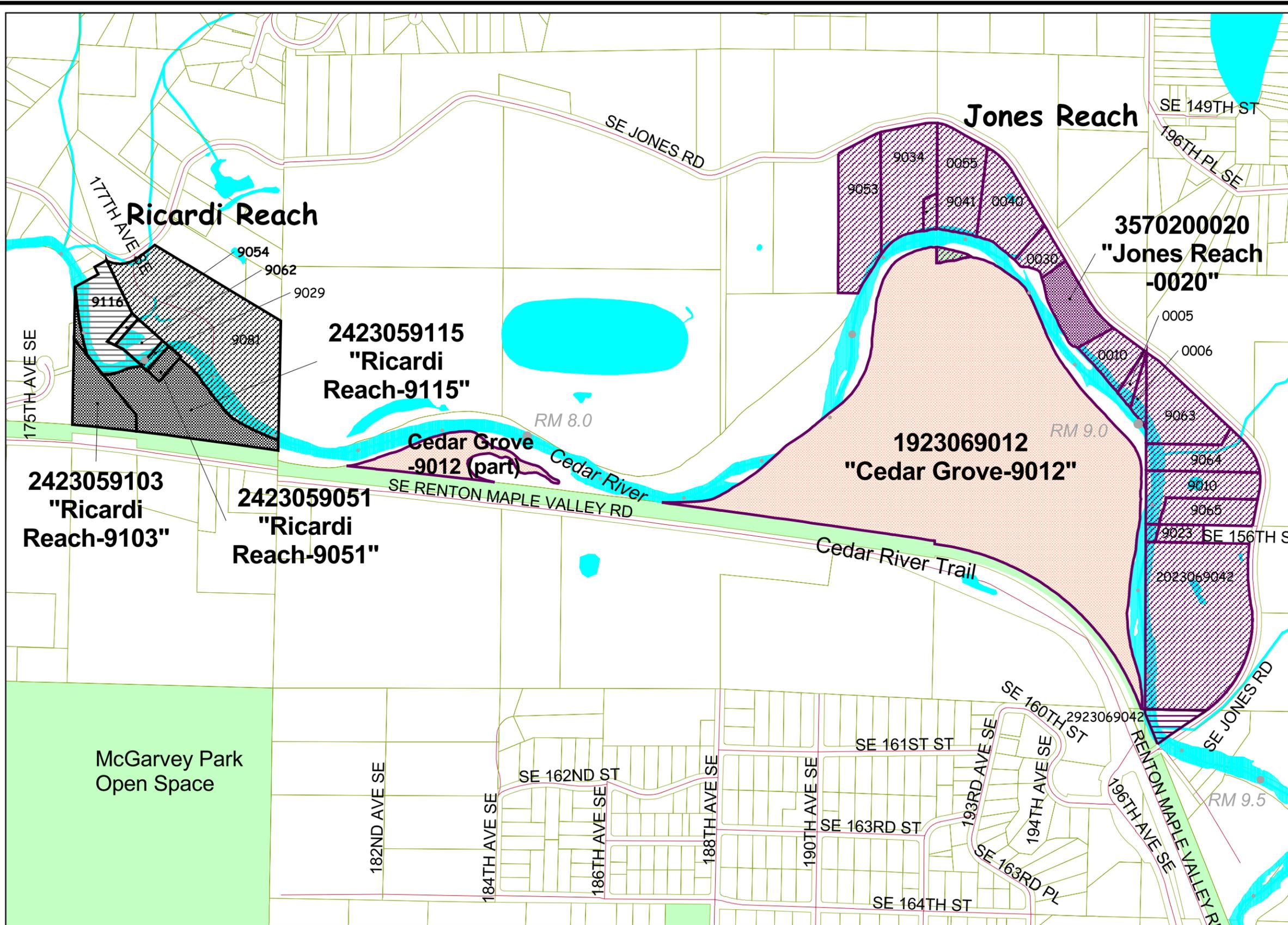
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King County

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Figure 1
 Vicinity Map



Legend

Note: Four-digit parcel labels represent the last four digits of the ten-digit parcel numbers. For full parcel numbers in each reach see Appendix A.

Cedar River Mile Markers

- River 1/10 Mile
- River 1/2 Mile
- River Mile

- ▭ Jones Reach Boundary
- ▨ Jones Reach Natural Area
- ▨ Jones Reach: Private Ownership
- ▨ Jones Reach: Other KC-owned Parcels
- ▨ Cedar Grove Natural Area
- ▭ Ricardi Reach Boundary
- ▨ Ricardi Reach: Private Ownership
- ▨ Ricardi Reach: Other KC-owned Parcels
- ▨ Ricardi Reach: Other KC-owned Parcels
- ▭ Rivers and Lakes
- ▭ Streams
- ▭ Streets
- ▭ King County Tax Parcels
- ▭ Cedar River Trail
- ▭ Public Recreation Lands



February 23, 2004
 200 0 200 400 600 800 1000 Feet

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Figure 2
 Ricardi and Jones Reaches: Identification of Reaches,
 Natural Area Parcels, and Other County-Owned Parcels

Jones Reach

Jones Reach lies just east of Ricardi Reach, and contains two Natural Areas. Cedar Grove Natural Area contains nearly 73 acres of land on the left bank of the river between RM 9.3 and 7.8. Jones Reach Natural Area contains just under 3 acres of land on the right bank, located at RM 8.9.

Cedar Grove Natural Area includes the land contiguous with and extending east of Ricardi Reach Natural Area on the left bank of the Cedar River. Together, Ricardi Reach Natural Area and Cedar Grove Natural Areas extend for approximately 1.25 miles along SR 169 to the intersection with SE Jones Road. Jones Reach Natural Area is located across the Cedar River on the right bank. The site is located on a steep slope between Jones Road and the river, immediately east of 19221 SE Jones Road.

The King County Roads Division owns one parcel in Jones Reach: 292306-9042. This site was acquired and restored (with riparian plantings, large woody debris installation) as mitigation for work on the Cedar Mountain Bridge. This site is currently monitored under King County Roads' county-wide monitoring program. The Roads Division also owns a parcel just upstream (parcel 292306-9007) which is mostly vegetated and includes a small rental house (Jaramillo pers. comm. 2004).

Surrounding Vicinity

Most of the immediate vicinity of these properties is zoned rural residential, allowing one unit per 5 acres, though some nearby housing developments south of SR 169 have been developed to higher densities (2-4 units per acre). The Riverbend Mobile Home Park occupies the river frontage just downstream of Ricardi Reach Natural Area. On the right bank of the Cedar River are low-density lots between SE Jones Road and the river, including the current Jones Reach Natural Area holding. Upstream, properties along the Cedar River are zoned one home per 10 acres. Approximately 1/10 mile to the southeast of Cedar Grove Natural Area, on the right bank of the Cedar River, are a large number of parcels zoned for mineral extraction, extending from Jones Road to Cedar Grove Road. To the east of these mining parcels lies the King County Cedar Hills Landfill.

There are several other publicly owned lands that provide open space or recreation opportunity in the vicinity. Cavanaugh Pond is located ¼ mile downstream of the sites. Downstream of Cavanaugh Pond, within the urban growth boundary, several miles of the riverfront are protected through Interstate 405 within the Renton-owned Cedar River Regional Park, the Maplewood Golf Course, and the Renton-owned Cedar River natural zone. Three large multi-use King County Parks are located on the plateau to the south of the Cedar River valley floor: McGarvey Park, Petrovitsky Park, and Spring Lake/Lake Desire Park. The 850 contiguous acres are located on the south side of SR 169 from Ricardi Reach and Jones Reach, separated by a tract of rural-zoned parcels 1/3 mile wide.

Part 2. Acquisition History, Funding Source and Deed Restrictions

The following section describes acquisition information for each parcel within the Natural Areas.

Ricardi Reach Natural Area

Ricardi Reach-9115

The Ricardi Reach-9115 parcel was purchased with Cedar River Legacy funding. The property has the following restrictions in the title: "The property herein conveyed is subject to open space use restrictions and restrictions on alienation as specified in RCW 84.34.200, et seq., and King County Ordinance No. 9071, 10750 and 11068." (First American Company 1998) These restrictions refer to the following documents:

- Ordinance 9071 (July 27, 1989) authorized a public vote on 1989 Open Space Bonds.

- Ordinance 10750 and 11068 (March 8 and October 3, 1993) authorized the Regional Conservation Futures 1993 Bond Acquisition Program (per regulations in RCW 84.34.200). Under Conservation Futures, property use is restricted to low-impact passive-use recreation, non-motorized use, and minimum 15% impervious surfaces.

For funding source information see below “Funding Source Descriptions and Restrictions” section.

The Ricardi Reach-9115 parcel has utility and road easements on the title which do not clearly indicate the location of easements.

This parcel may have river protection easements in areas where levees or revetments occur (see Part 3: Hydrology/Levees section below and Figure 3 for levee/revetment locations), but which were not revealed in title/acquisition work. While these parcels were in private ownership in the 1960s, river protection easements may have been purchased by what is now the King County Flood Hazard Reduction Services group (FHRS). A King County river protection easement no longer exists once King County purchases the property. If the FHRS group determined that they indeed had a river protection easement, they would need to ensure that if the property is transferred to another King County Division or Department for management, WLRD management would need to secure that a similar policy decision is made to secure FHRS’ right of access, or that this right is formalized in an interagency agreement. If the parcel were to be surplus in the future, King County would need to make sure it retains a river protection easement. Further information about the flood facilities and about WLRD policy on FHRS access and maintenance of flood facilities is provided in Part 4.

Ricardi Reach-9051

The Ricardi Reach-9051 parcel was purchased with Cedar River Legacy funding, and is thereby subject to the CFT and Open Space Bond fund conditions (see below). This parcel spans the Cedar River, with property on both the north and south sides. The site lacked legal access from the north side upon purchase, although King County now owns adjacent parcels to the northwest of this parcel (King County 2002a).

The property has a number of easements on the title:

- King County River Protection Easement Recorded 9/14/62 (#5479819) for construction of river bank protection (i.e. the Ricardi Revetment) (See discussion of river protection easement obligations under Ricardi Reach-9115 acquisition information above.);
- Puget Power electrical transmission easement (#2681253);
- Private roadway easement affects northeasterly 20 feet (King County 2002b).
- It is noted on the title that the site lacks legal access.
- No specific deed restrictions associated with the funding source were noted on the title documents.

Ricardi Reach-9103

The Ricardi Reach-9103 parcel was purchased using Forward Thrust Bond funding (see description in next section) Forward Thrust allocated \$825,000 for the acquisition of 250 acres for Regional Parks in various sites in the Cedar River Valley between Renton and Maple Valley. Regional Parks are intended to provide outdoor recreation opportunities to a regional population; development is not to detract from scenic or natural characteristics of the area. The regional park along the Cedar River in Renton, Washington was intended to be a “family oriented park [that] will include parking, active playing fields, and passive quiet areas.” (King County 1979) The mandates for parking and active recreation were satisfied in other portions of the acquisition, on lands that are currently used for active recreation owned by the City of Renton two miles west of the site.⁴

⁴ Acquisition documents for Cedar Grove Natural Area parcels denote that many were part of an IAC project “Cedar River Regional Park Site.” However, current records of IAC grants to King County do not list a project of this name, which is accurate to the best knowledge of Park staff (Eksten pers. comm. 2003).

The parcel was acquired for \$6,000 in 1977. There are no deed restrictions on the title.

Although there is no evidence that a river protection easement exists on this site, if FHRS determined that they did own a river protection easement, the conditions described above under Ricardi Reach-9115 would apply.

Cedar Grove Natural Area

The Cedar Grove-9012 parcel was also acquired in the late 1970s using Forward Thrust Bond funds as described above. This parcel was formed after the acquisition of a number of smaller parcels comprising this peninsula. Acquisition information for various parcels that now comprise this parcel is incomplete. No record exists as to how the parcels were merged as one unit. The title deeds that are available in Parks Archives files contain no explicit use restrictions, though there are easements for flood control and for utility lines placed on certain parcels. The parcels themselves no longer exist but these easement locations are still applicable.

Any easements for flood control would be treated as discussed above under Ricardi Reach-9115 acquisition discussion.

Jones Reach Natural Area

The Jones Reach-0020 parcel is the first of a number targeted acquisitions on the right bank of the Cedar River in this Reach, between SE Jones Road and the river. Funding has been provided from Salmon Recovery Funding Board grants (see description below). The Wagner property was purchased using a combination of SRFB funds granted for Jones Reach, and Cedar River Legacy funding. A deed of right for SRFB was filed for this property restricting development and transfer of the property.

The Jones Reach-0020 parcel has a King County river protection easement dating to 1960. This river protection easement would be treated as discussed under Ricardi Reach-9115 discussion.

Funding Source Descriptions and Restrictions

The following information pertains to the funding sources referred to in the above deed language:

- *Conservation Futures Tax Levy:* Conservation Futures Tax (CFT) levy is authorized by state statute RCW 84.34.230. A county may place this levy upon all taxable property in its jurisdiction. Revenues may be placed in a Conservation Futures Fund for jurisdictions or nonprofit nature conservancy corporations to acquire open space land or rights to future development within that county (these development rights are termed “conservation futures” in RCW 84.34.220). Open space is defined in RCW 84.34.020 generally as land contributing to natural resources, streams, water supply, public land network, historic sites, visual quality, or as certain agricultural conservation lands. Acquisition criteria identified by King County include: wildlife, salmonid, or rare plant habitat value; scenic resource, community separator, greenbelt, or general park and open space value; or historic and cultural resources. Additional consideration is given to passive recreation opportunity, interpretive opportunity, threat of loss, complexity of acquisition, public-private partnership, regional significance, relationship of proposed acquisition to existing parks, trails, or greenway systems or plans, and short-term and long-term stewardship commitment at the site (KCC 26.12.025).

King County Council directs the spending of a portion of annual CFT funds; a Citizen’s Oversight Committee reviews and approves competitive applications for the remainder of the funds. CFT funds are allocated to sponsoring jurisdictions with the requirement that matching funds from the applicant jurisdiction are of equal or greater value to CFT funding sought (matching funds may be cash, land trade, or value of land purchased adjacent to proposed acquisition). Acquisitions may be fee simple or less-than-fee acquisitions.

Purchases made with Conservation Futures funds are to be used for low-impact, passive-use recreation. Motorized use is limited to parking/staging/maintenance areas. “Non-vegetative impervious surfaces” should cover less than 15% of the site (CFT 2002). Conservation futures interests shall not be transferred except with agreement that land interests shall be preserved in accordance with the intent and language of RCW 84.34.230; uses of lands shall not be altered unless equivalent lands within the geographic jurisdiction are provided (KC Ordinance 10750, p. 10).

- *1989 Open Space Bond*: King County voters authorized the \$117,640,000 King County Open Space Bond initiative, described in King County Ordinance 9071, in November 1989 to provide funds for the acquisition, development, renovation and improvement of public green spaces, green belts, open space, parks and trails in King County. Specific goals included preserving wildlife, enhancing scenic vistas, providing access to the water and open space, and providing trail connections between virtually all the cities in King County to a regional trail system and trails within the suburban cities and unincorporated areas of King County (King County Council 1989). King County Ordinance 9071 authorizes reclassification of bond funds in Section 8, part C. Restrictions on land conveyance associated with Open Space Bond funds are identified in Section 8, part D.
- Forward Thrust was a major King County works program with bond proposals encompassing transportation, community, housing, water issues, and other publicly financed capital improvements. On February 13, 1968, voters approved Proposition 6 (authorized by King County Council Resolution 34571), a \$118 million bond proposal for the purchase, creation and improvement of parks throughout King County.

Land use restrictions associated with Forward Thrust Funding are identified in Section 7 and Section 9 of King County Resolution 34571.

"Public Park and Recreation Facilities acquired, developed, constructed or improved by the County or any City in whole or in part from the proceeds of the bonds authorized pursuant to this resolution shall not be transferred or conveyed except by agreement providing that such lands shall continue to be used for the purposes contemplated by this resolution, or be converted to a different use unless other equivalent lands and facilities within the County or City shall be received in exchange therefore. The proceeds of any award in condemnation applicable to such Public Park and Recreation Facilities shall be used for the acquisition or provision of other equivalent lands and facilities. However, nothing in this resolution shall prevent the grant of easements or franchises or the making of joint use agreements not incompatible with the use of Public Park and Recreation Facilities for the purposes of this resolution." (Section 7)

"...Public Park and Recreation Facilities acquired or developed pursuant to this resolution whether located partly or wholly within or without the Cities of the County will be available to and be of general benefit to all of the residents of the County and, together with existing lands and facilities set aside for such purposes, will constitute a necessary system of Public Park and Recreation Facilities for the County and its residents." (Section 9)

- *Salmon Recovery Funding Board*: The Washington State Salmon Recovery Funding Board (SRFB) was created in 1999 to administer funds for salmon recovery appropriated by the state legislature and Congress (RCW 77.85). (SRFB 2002) SRFB's mission is to "support salmon recovery by funding habitat protection and restoration projects and related programs and activities that produce sustainable and measurable benefits for fish and their habitat." SRFB receives administrative support from the State Interagency Committee for Outdoor Recreation (IAC).

Project sponsors such as cities, counties, agencies, tribes, non-profit organizations, and private citizens submit applications to local lead entities such as Watershed Resource Inventory Area Steering Committees. The lead entities submit prioritized lists of project applications to SRFB for

consideration. Sponsors request funds to protect or restore salmon habitat, commit to long-term monitoring, and provide a monetary or in-kind match of 15% or more. Projects may include acquisition; in-stream passage or diversion; in-stream, riparian, upland, or estuarine habitat actions; or assessments and studies.

Lands acquired in fee with SRFB assistance must be dedicated to habitat conservation, outdoor recreation or salmon recover uses in perpetuity. This is done through a recorded Deed of Right to Use Land for Habitat Conservation, Salmon Recovery, or Outdoor Recreation Purposes. This Deed conveys property interests to the public forever.

Part 3. Ecological and Physical Setting

This section describes the existing natural resources and ecological processes associated with these two reaches and their respective Natural Areas. Additional analysis is presented in Part 6 below. Figure 3 depicts site features such as topography, streams, wetlands, and floodplains.

Topography

The valley of the Cedar River is very narrow (less than ¼ mile wide) just upstream of these properties, confined between steep slopes south of SR 169 and on the north (right) bank of the Cedar. As the river curves around the Cedar Grove-9012 parcel, the narrow valley widens to approximately ½ mile in width, bounded by SE Jones Road and SR 169 at the edges of the slope. Cedar Grove-9012 parcel and all of Ricardi Reach Natural Area lie within the floodplain of the Cedar River, with little topographic variation at the sites.

The Cedar Grove-9012 parcel is a peninsula around which the Cedar River takes several sharp turns as it shifts from flowing north to flowing west. Overflow channels cross this parcel and are active at times of high water. Steep banks on the right bank of the river physically limit the course of the river northward.

The north valley wall along nearly the entire five mile length of SE Jones Road is steep (40% slopes in some places) and contains seeps and springs that have contributed to historic slumping and landsliding. The Jones Reach-0020 parcel contains a portion of these slopes, which extend to the river channel. At the parcel itself, there is approximately a 50 foot drop from SE Jones Road to the river. These small landslides or slumping, including a slide on the Jones Reach-0020 parcel that threatened the integrity of the roadway and required repair. No acquisitions are planned on the north side of Jones Road where much of the landslide and slump activity originates. There may be additional future acquisitions made along the south side of Jones Road.

The Cedar River Trail, the former railroad grade, limits the extent of river meander to the south and creates an abrupt linear boundary on the south edges of the Ricardi Reach properties and Cedar Grove-9012 parcel. A number of revetments along the river contain flows in the main channel during most of the year (floods may crest over the revetments at times of high water). Revetments are further described in Part 4.

Soils

The King County soil survey maps Ricardi Reach parcels as Puyallup fine sandy loam and Riverwash soils (Snyder et al 1973).

- Puyallup soils are well-drained, located on “the natural levees adjacent to streams in river valleys,” found at low elevations with 0-2% slopes. Permeability is moderately rapid, but they may contain poorly drained inclusions of soils. Puyallup soils are located toward the southern portions of these parcels.

- Riverwash are “long, narrow areas of sand, gravel and stones along channels of larger streams.” If vegetated, common species include cottonwoods or willows. “Overflow and alteration by severe erosion and deposition are frequent.” Riverwash soils comprise the soils bordering the river..

The Cedar Grove-9012 parcel on the left bank of the river is mapped as Pilchuck fine loamy sand.

- Pilchuck loamy fine sand is located on terraces adjacent to streams, found at low elevation, with 0-2% slopes and rapid permeability. Common inclusions are high amounts of riverwash, Puyallup, and other soil types.

The slopes on the right bank of the Cedar River, in the areas, Jones Reach-0020, contain one soil type:

- Alderwood gravelly sandy loam (AkF), very steep slopes (25-75%). Runoff is rapid to very rapid; erosion hazard is severe to very severe; slippage potential is severe. Alderwood soils are moderately well-drained soils located at upland sites, formed under conifers in glacier deposits.

Hydrology and Channel Morphology

Cedar River

Using maps and aerial photographs, Perkins (1994; also King County 1993a) described historic changes in channel characteristics in the reach extending from RM 5.8 and 9.4. This reach was identified based on channel morphology and slope. The Cedar River Current and Future Conditions Report (King County 1993a, p. 5-22) describes this reach as follows:

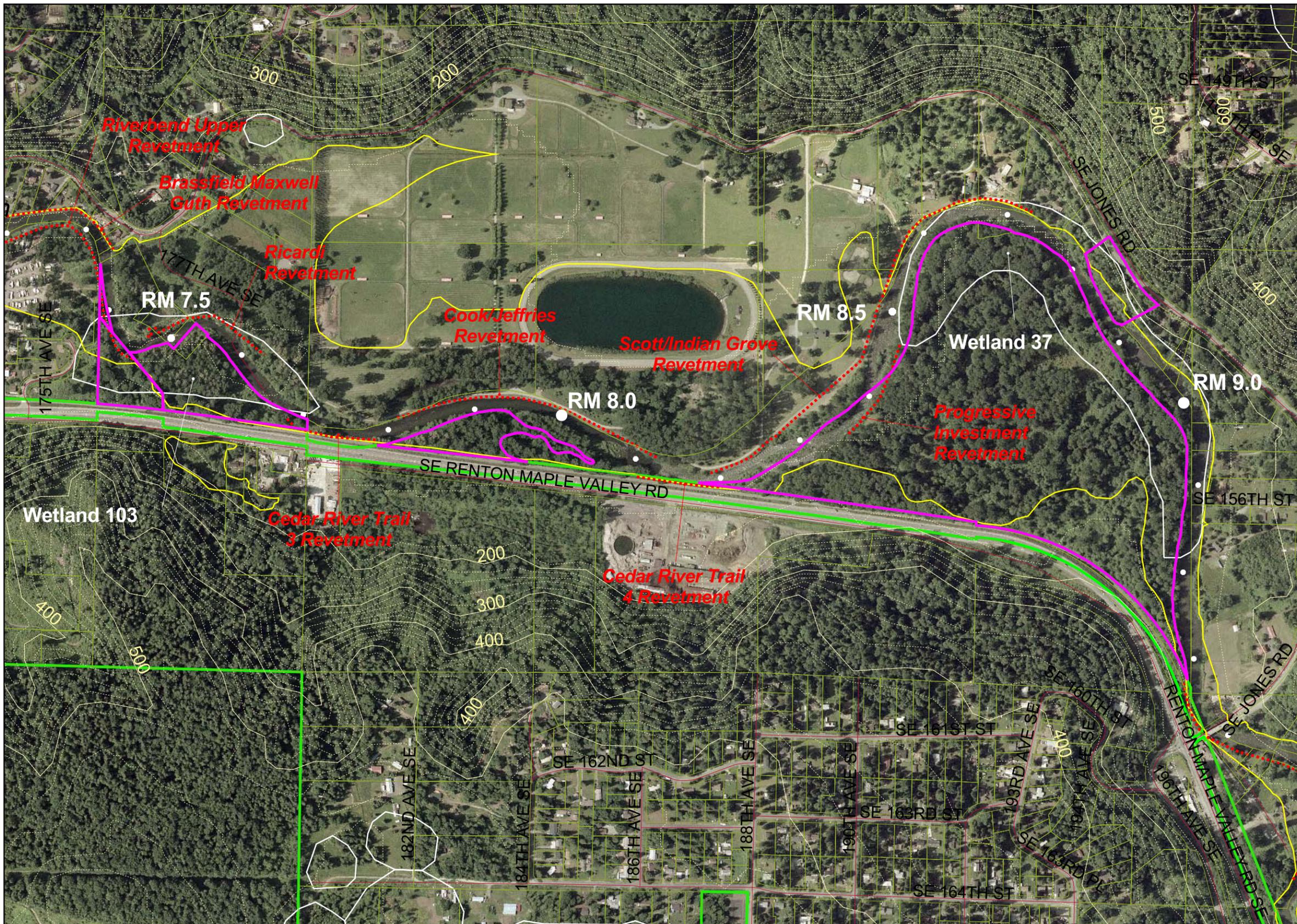
“This reach was historically braided and the meander belt was ¼ mile wide... This reach has narrowed to less than half its 1936 width due to filling the floodplain and levee [and revetment] construction. In many places levees [and revetments] line both banks, preventing flows from spreading over the floodplain and thereby creating extremely high velocities that severely damage revetments... Rapid channel migration could occur in the future... Eventual failure of revetments would allow the river to reoccupy old channels on the floodplain” (King County 1993a, p. 5-28)

Perkins noted that the 1895 active channel width was 220 feet, and in 1989 the active channel width was only 110 feet. She also characterized the natural degree of confinement as “unconfined,” but characterized the current level of hydrological modifications as “high.” The wetted channel width has decreased from a maximum of 143 feet and minimum of 77 feet in 1895 to a maximum of 99 feet and minimum of 82.5 feet in 1989. During this same period, historic pool frequency has decreased from “high” in 1895 to “low” in 1989 (Perkins 1994, Blair 2003).

The mapped FEMA 100-year floodplain for the Cedar River depicts areas predicted to be inundated by a flood event of a severity that has a 1% chance of occurring in any given year (Faegenburg, pers. comm. 2004) (see Figure 3). The FEMA floodway is the area within and adjacent to the channel that is subject to the deepest and fastest flood flows. Although the FEMA floodway is not mapped on Figure 3, it is contained entirely within the mapped 100-year floodplain. The 100-year floodplain and floodway maps for this reach of the Cedar River have been recently updated and are considered best available data, but are awaiting adoption by FEMA (Faegenburg, pers. comm. 2004).

The Cedar Grove-9012 parcel and Wetland 37 located on the peninsula (described below) have been identified in the Lower Cedar Basin Plan as a severe channel migration hazard area (left bank, RM 8.5-9.0) (WMC 1998, p.4-90). The 100-year floodplain downstream of Cedar Grove-9012 includes the lands between the Cedar River and the Cedar River Trail on the south side of the river, and extends between 0.1 and 0.3 miles north of the river channel into many of the properties along the north side of the river.

There are no mapped side channels in this area. However, as noted in “Topography,” aerial photos show side channels or overflow channels across the Cedar Grove-9012 peninsula, which may indicate the main routes of flow during high water.



Legend

Aerial photo from 2002.

- Natural Area Parcels
- River Mile Markers
 - River 1/10 Mile
 - River 1/2 Mile
 - River Mile
- King County Tax Parcels
- Levees and Revetments
- Floodplains - 100 year
- Wetlands
- Streets
- 100 ft Contour lines
- 20 ft Contour Lines
- Selected public lands



February 23, 2004
 200 0 200 400 600 800 1000 Feet

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Wetland, stream, floodplain topographic layers approximate, mapped from GIS system


King County

File Name: IL:\w\m\5\1\NR Land Mgmt\Ingrid ArcView Projects\smg parkview projects\ricardi\ricardi fig 3.apr

Figure 3

Ricardi and Jones Reaches: Site Features

Revetments

There are a number of revetments in the vicinity (see Figure 3). These facilities are located on both banks of the Cedar River in this reach.

- The Progressive Investment Revetment extends along the western portion of Cedar Grove-9012 parcel along the left bank, and has largely been abandoned. The revetment is being allowed to erode by water from the Cedar River and from side-channel flow across the Cedar Grove-9012 parcel.
- The Scott-Indian Grove Revetment on the right bank is intended to prevent channel migration in the vicinity of several homes.
- Two Cedar Trail Revetments (Revetments 3 and 4) protect the Cedar River Trail.
- The Riverbend Upper and Lower Revetments originate at the western extent of Ricardi Reach-9103 parcel, and extend downstream around the Riverbend Mobile Home Park. These facilities primarily provide protection against river channel migration, but also provide some limited overbank protection.

As noted in Part 2, King County FHRS may have acquired river protection easements on parts of these four parcels when they were in private ownership. Although the river protection easement would no longer be in existence, it is the policy of the Water and Land Resources Division that FHRS has the same rights and responsibilities for the river protection easement as when the property was under private ownership. Rights include the right to access and to ensure that the flood facility is maintained; responsibilities include notification of property owner (NRL) when work is required on the facility, and obtaining applicable permits. Work that is outside of the scope of standard inspection of river protection facility (e.g. revegetation project or facility repair) would require notification of NRL and completion and approval of the “Application to alter Parks/NRL-Managed Property.”

The river protection facilities on the property is maintained by FHRS as part of their river protection facility inventory. FHRS performs both routine and post-flood inspections and maintenance on all such facilities. Routine maintenance activities on these facilities typically include vegetation management, such as removal of blackberries, in order to ensure adequate access and visibility for inspection of the facilities’ structural integrity (Koon pers. comm. 2003).

In addition to the routine maintenance and repair of these flood hazard reduction facilities, the FHRS Section performs mapping and other flood-related studies and projects on lands adjacent to King County’s large rivers, including the Cedar River. FHRS and/or its contracted surveyors may have placed permanent stakes or rebar along the levee/revetment or riverbanks to mark sites at which river cross-sections are measured (Koon pers. comm. 2003).

Tributaries

There are a number of mapped tributaries in these reaches mapped on the King County Sensitive Areas Folio and the Catalog of Washington Streams.

- Two unnamed streams emanate from the slopes north of the river, under Jones Road and enter the Cedar River in the vicinity of the western county-owned Ricardi Reach parcel (9116). These streams are WRIA #08.0308, a 0.9 mile tributary that enters the Cedar at RM 7.1, and WRIA #08.0310, a 1.2 mile tributary that enters the Cedar at RM 7.25.
- An unnamed 1.7 mile stream (WRIA #08.0311) on the left bank of the Cedar flows from the steep slopes on the southern valley wall, is culverted flowing eastward under SR 169 for ½ mile, and flows out beneath the Cedar River Trail to its confluence at RM 7.75 (mapped location at the Cedar Grove-9012 parcel).

- A short unnamed and unnumbered right-bank tributary is mapped in the vicinity of the Jones Reach-0020 parcel, entering the Cedar River at approximately RM 8.9.

The Current and Future Conditions Report notes in the description of the Ricardi Reach vicinity that “the highway and fill under the Cedar River Trail (formerly a railroad bed) appear to have altered hydrology of this area of the floodplain by confining floodwaters within a narrow portion of the valley and concentrating drainage from the south wall through cross culverts.” (King County 1993, 7-81)

The Jones Reach-0020 parcel supports areas of seeps where sub-surface water emerges and flows intermittently down the slope.

Wetlands

Two wetlands mapped in the King County Wetlands Inventory occur within these reaches. The Cedar River Current and Future Conditions Report provides the following descriptions:

Wetland 103 is located primarily on Ricardi Reach-9103, -9051, and -9115 parcels.

“Wetland 103 is a 6-acre forested riparian system between the Cedar River Trail and the mainstem between RM 7.3 and 7.6.... A debris-filled side channel loops out from the mainstem near RM 7.5. Elsewhere the soils consist of sand and silt underlain by gravel and cobble. Overgrown scroll bars were observed in the wetland, attesting to past channel migration through this area. The active side channel may provide hydraulic refuge for fish during floods.” (King County 1993 7-81)

Wetland 37 is located on the eastern portion of the Cedar Grove-9012 parcel.

“The 1990 inventory describes Wetland 37 as a 30-acre Class 2 forested/scrub-shrub system on the convex side of a meander bend between RM 8.3 and 9.1 in Cedar Grove Park [i.e. Cedar Grove-9012 parcel]. Three brief winter field visits revealed much of this area to be a low terrace with ridge and swale topography and several old percolation channels... [T]he main percolation channel...traverses the wetland northwesterly from approximately RM 9.0 to RM 8.4. Another wetland was found in an old chute cutoff near the Cedar River trail, outside the wetland area shown on the inventory map. ...The left bank of the river is unarmored from RM 9.2 to 8.4, allowing overbank flows to traverse much of the site unimpeded. During the 1990, this area was under several feet of water. Additional hydrology comes from seasonal upwelling into the percolation channels and swales. In addition to flow attenuation, water quality protection, and possible flood refuge for salmonids, this riparian area provides outstanding wildlife habitat.... Like Wetland 103, Wetland 37 has been partially cut off from hydrologic source areas at the base of the south valley wall by SR 169 and the old railroad bed. Several thousand square feet of the buffer were filled [in the early 1990s] to create a staging area for construction of the trail.” (King County 1993, p. 7-81, 7-82)

Acquisition documents for the right bank Jones Reach-0020 parcel indicate that the seeps and emergent groundwater throughout the slopes on the site contribute to the presence of wetland conditions on many portions of the slopes (Schulz 2001).

Vegetation

These sites support well-developed red alder and black cottonwood forest with a small proportion of coniferous overstory trees, as is typical along the riparian zones of this section of the river. The understory contains native species such as willows, salmonberry, and Indian plum, as well as extensive populations of invasive non-native species including Japanese knotweed, Himalayan blackberry, and butterfly bush.

This riparian system is dominated by these early-successional species in areas where channel migration has typically occurred. Flood control activities in the late 1960s may have a long-term impact on the

vegetation of the riparian corridor by reducing the breadth of the corridor under direct influence of river dynamics. Large-scale flood events may disturb vegetation and affect successional patterns.

Ricardi Reach Natural Area

In Wetland 103, on the western portions of the site, the Current and Future Conditions Report and the Wetland Inventory (King County 1991) identified a canopy of red alder, cottonwood and bigleaf maple, with Pacific willow, hemlock and cedar; an understory of hardhack, salmonberry, red-osier dogwood, and Himalayan blackberry and Japanese knotweed. “A grove of old fruit trees occupies the buffer along the eastern tip of the wetland. Significant habitat features include numerous deciduous snags [taller than 25 feet in height (King County 1991)], mounds of cobble covered by logjams, and large accumulations of river-bore woody debris near the northeast corner of the wetland.” (King County 1993, p. 7-81)

Cedar Grove Natural Area

At Wetland 37, similar species composition as described for Ricardi Reach above is noted in the wetter portions of the site: bigleaf maple, red alder, cottonwood, spruce, hemlock, elderberry, blackberry, willow, and spiraea (King County 1991). Additionally, “a dense patch of scrub-shrub vegetation, mostly vine maple, is present south of the main percolation channel... Some of the higher portions of the site have predominantly upland vegetation, including a large stand of mature fir and big leaf maple near RM 8.8 and a magnificent grove of old growth cedars in the east interior of the site. In addition, several small areas vegetated with Scot’s broom and grasses appear to have been graded and possibly filled in the past, perhaps as homesites or campsites.... Impacts to Wetland 37 include invasion of some areas by Japanese knotweed, Himalayan blackberry, and English ivy, which festoons some of the tall cottonwoods near the northeast edge along the river. ” (King County 1993, p. 7-81, 7-82)

Jones Reach Natural Area

The Jones Reach-0020 parcel is predominantly red alder, bigleaf maple, and black cottonwood, with scattered western red cedar. Understory includes vine maple, hazelnut, Indian plum, and salmonberry. Skunk cabbage, sword fern, lady fern, and bulrush are all present as herbs (Schulz 2001).

Fish and Wildlife

The mainstem Cedar River supports coho salmon, Chinook salmon, sockeye salmon, coastal cutthroat trout, and winter steelhead (Kerwin 2001 p. 329). There have been no studies of wildlife presence at the site. Species noted in the Current and Future Conditions Report and the King County Wetland Inventory include deer, flycatcher, swallows, chickadee, thrush, and goldfinch (King County 1993, p. 7-81; King County 1991). The King County Wildlife Habitat Corridor is mapped along the Cedar River through this area, which identifies linkages across the landscape important for wildlife habitat.⁵

Part 4. Public Use and Infrastructure

The parcels on the southern side/left bank of the Cedar River within the two reaches support minimal public use. Most uses occur at the Cedar Grove-9012 parcel, where road pullouts along SR 169 allow

⁵ The King County Wildlife Habitat Network is described in the 2004 update to the King County Comprehensive Plan as a method to “identify and protect critical fish and wildlife habitat conservation areas, [and] to link those critical habitat areas and other protected lands through a network system.” (King County 2004, p. 4-19) The network is intended to provide some degree of landscape-level protection for wildlife species, to maintain wildlife as viable components of ecosystems, and to facilitate wildlife movement between large habitat patches. This approach creates a network of natural lands across the landscape by linking contiguous blocks of ecologically significant natural resource areas (hubs) with natural corridors through adjacent critical habitat, open space tracts, and wooded areas. Ideally, these corridors would enable terrestrial populations to intermingle and disperse from east to west and north to south within the County.

unofficial parking for the site. This parking is not a legal parking area for the site, and it is probably illegal to park along as state highway in this area. A short informal trail extends from the Cedar River Trail to the water, through the western portion of the parcel. This trail experiences regular use by pedestrians to access the river.

The Current and Future Conditions Report states that Wetland 103 (Ricardi Reach Natural Area) “receives informal recreational use from foot trails that extend from the revetment and the main trail” (King County 1993, 7-81). These informal trails extend into the site periodically along the Cedar River Trail. There are no formal or maintained trails at the site, nor is there parking at the site.

The access point on the western side of Cedar Grove-9012 site in particular is subject to littering and dumping by the public, from the Cedar River Trail/SR 169 access points, on the trail, and along the Cedar River. Park staff collect litter regularly at the site.

Most of the 0.46 acre Ricardi Reach-9051 parcel is located “on and in the Cedar River 500 to 600 feet southeast of SE Jones Road” and extends across the river (King County 2001). The adjacent properties to the north are owned by King County as well. Acquisition documents indicate that a dike road runs from SE Jones Road to the north corner of the property. The dike road provides access to this small portion of Ricardi Reach-9051 and other King County owned parcels on the north side of the river. There is a locked gate at the junction of the dike road and SE Jones Road to prevent uncontrolled vehicular access (King County 2002a).

Jones Reach-0020 parcel experiences no known public use. The steep slopes make access difficult, and the road shoulder provides minimal parking.

There are no revenue-generating opportunities apparent on these Natural Areas.

Part 5. Site Management Chronology

There is little to no available information about pre-acquisition history.

Limited, small-scale restoration has occurred on Cedar Grove-9012 parcel. In the late 1990s native plants were planted within the interior of Wetland 37. The exact number of plants and species are unknown, but many have survived.

Within Ricardi Reach, on the right bank across from the Ricardi Reach Natural Area, restoration work was initiated following the 1990 flood. Two homes subjected to repeat hazardous flooding (located on parcels 242305-9062 and 242305-9054, see Figure 2 labeled “9062 and 9054”) were purchased and demolished. Shortly thereafter, an attempt was made to construct an off-channel pond feature. However, due to limited space, the channel outlet was poorly sited and as a result the pond feature has not functioned as intended and there has been high plant mortality.

In 2002 a grant from the Salmon Recovery Funding Board (SRFB) was received for the purpose of developing a floodplain restoration design. The design work will be occurring during 2003-04. The primary objective of the floodplain restoration project will be to modify and remove the revetment along the right bank of Ricardi Reach to reconnect the river channel with its floodplain. The design will affect much of the Ricardi Reach although the project footprint itself is expected to occupy mainly parcel 242305-9081.

The KC Transportation Department (KCDOT) has also acquired an approximately 3-acre parcel 242305-9116 for mitigation purposes for the Elliott Bridge replacement project (the bridge is located on SE Jones Road near Renton City limits). Mitigation consisted of placing deed restrictions on the parcel specifying permanent protection.

Part 6. Analysis

The purpose of this section is to provide a context and foundation for developing recommendations that meet the NRL program mission of protecting the ecological value of lands within the Jones, Cedar Grove, and Ricardi Reach Natural Areas. Site-specific information, public access considerations, and the larger landscape considerations described in the conservation principles section of the *Ecological Lands Handbook* will be used to help meet this purpose.

Information Gaps and Development of Management Recommendations

There are significant gaps in how much is known and understood about ecological conditions and physical processes in the Natural Areas because recent comprehensive baseline inventories of plant, fish, and wildlife species, and geologic and hydrologic conditions do not exist. This type of information is necessary prior to developing restoration concepts and specific designs, particularly for large-scale changes and modifications to site features. If basic site inventory and assessment is not done, there is a strong likelihood of inadvertently harming either individual plant or animal species or ecological processes that sustain one or more of these species.

Therefore, prior to undertaking major management activities in these Natural Areas, a site inventory and assessment should be undertaken that is focused, at a minimum, on the conditions and processes that the management activities will affect. Such assessment or evaluations of proposed actions should be conducted by those staff with appropriate expertise (e.g. Watershed and Ecological Assessment Team staff). Inventory and assessment information may be available in the Current and Future Condition Report, Habitat Limiting Factors Analysis, Lower Cedar Basin Plan, and Ecosystem Diagnosis and Treatment study of the Cedar River (being conducted at the time of writing), as well as past and future work by King County ecological staff.

Prior to minor management activities (e.g., small planting project), the proposed activity should be evaluated to determine whether or not the activity could do harm to existing or future desired ecological processes and conditions. If the likely outcome is harm, then the activity should not be undertaken.

Coordinating Management of King County Sites

Three parcels are in the NRL inventory on the left bank of Ricardi Reach. On the right bank of Ricardi Reach two parcels are in FHRS inventory, one parcel is in King County Roads inventory. Adjacent to these three parcels in the right bank, one parcel (-9081) may be acquired in the near future where FHRS project work would occur; it is unclear whether this parcel would be assigned to FHRS or NRL if acquired.

The parcels managed by NRL and by FHRS are all within the Water and Lands Resources Division inventory; the parcel owned by Roads is not actively maintained by that group. Actions undertaken to modify the levee and restore floodplain on the right bank parcels will affect the ecological dynamics at all the parcels in this reach.

Given parcel contiguity, the need for ecological functioning across the parcels, small parcel size of the FHRS parcels, and the efficiency of having site maintenance performed by a single party, it makes sense to have a single group hold management responsibility for all County-owned parcels in this reach. This issue is relevant to many other areas in the County where County-owned property may be managed by different sections within the County. This issue must be addressed at a management level within the Water and Land Resources Division regarding NRL and FHRS properties; coordinating management of Roads properties required inter-divisional coordination.

Species of Concern

Because of the lack of a comprehensive biological inventory at these sites, the species identified in this document do not account for all species that use the site for one or more stages of their lifecycles. However, documented evidence of Chinook salmon, and probable use by bald eagles, both listed as threatened under the Endangered Species Act, make habitat preservation and restoration necessary management priorities at the site.

Restoring Processes

Though little current information exists for restoring the ecological processes within the Natural Areas, the primary restoration goal for portions of the mainstem Natural Area sites confined by revetments should be to reconnect the river channel with its floodplain. Although this action could occur be accomplished in various ways (e.g. by reestablishment of connections between the main channel and off-channel floodplain), in-depth analysis of historic river conditions, hydraulics, and hydrology would be needed to determine the best approach for improving the channel-floodplain connection.

Although the Current and Future Conditions Report notes that SR 169 and the Cedar River Trail have disrupted hydrologic connections between the southern valley slopes and the Cedar River (see Part 3), there is little possibility of restoring the hydrologic connections due to the permanence of SR 169 and the railroad grade.

Restoring Structure and Function

In order to restore riparian habitat conditions, it may be necessary to control invasive, non-native species, and actively promote establishment and growth of a native riparian plant community, where possible, given site and budgetary constraints. Plantings should represent the historic vegetative communities commonly associated with forested riparian areas in western Washington and at these sites in particular. Inherent in the restoration should be efforts to maintain structural complexity, historic levels of plant diversity and multiple canopy layers in order to provide a variety of vegetative and physical features that would provide a number of niches for wildlife.

Part 7. Management Goals, Objectives, and Recommendations

The objectives and recommendations in this section are derived from the standard practices for most NRL sites. Office of Rural and Resource Programs staff will revise the recommendations for these Natural Areas as new information from baseline inventory, assessment, and site monitoring programs and other initiatives becomes available for use in land management decisions.

Goals for Ricardi Reach, Cedar Grove, and Jones Reach Natural Areas

The goals for all King County Ecological Lands are to:

- conserve and enhance ecological value, and
- accommodate appropriate public use that does not harm the ecological resources on site

The objectives and recommendations that follow are designed to support these goals at these Natural Areas.

Management Objectives and Recommendations

Objective: Maintain ecological integrity of the site

Recommendation: Ensure that management and public access support the regional ecological value of the sites

Decisions about site management and public access should consider the regional significance of the large tracts of riparian forest and off-channel wetlands at the site. Public access should be focused on the short river access trail at the west edge of Cedar Grove Natural Area; dense vegetation, topography, and wetlands limit access to most other portions of these sites. This overarching recommendation is carried out through the various recommendations below.

Objective: Develop long term ecologically based protection and restoration actions

Recommendation: Perform baseline inventories and assessments

Complete baseline inventories and assessment of basic ecological conditions and physical processes. Staff with appropriate expertise (e.g., ecologists, biologists, and engineers) should perform this work. Existing documents, studies, and staff research may contribute substantial inventory and assessment information about the sites.

Recommendation: Develop recommendations for site restoration from inventory information

Use inventory and assessment information to develop projects to achieve a set of goals and objectives consistent with those identified for King County Ecological Lands.

The Lower Cedar Basin Plan makes a number of management recommendations in the vicinity of the site that may be considered for future recommendations. These general proposals are aimed at the multiple interests of the Lower Cedar Basin Plan (flood hazard reduction, habitat quality and salmonid health, and water quality and quantity) and may or may not be in accordance with ecological land management goals. They are not prioritized or scheduled for implementation in the near term. Many recommendations for flood hazard reduction come from the 1993 Flood Hazard Reduction Plan (FHRP). The 1993 FHRP is currently being updated; flood control recommendations listed below may be revised to reflect current budget, management priorities, and development conditions.

The WRIA 8 Draft Plan Framework and Preliminary Actions List (WRIA 8 Service Provider Team 2003) noted additional recommendations for this area (Chapter 6, p. 4). As with the Basin Plan recommendations, these proposals are not prioritized or scheduled for implementation.

Lower Cedar Basin Plan Recommendations:

- Within Ricardi Reach Natural Area, a restoration projects is identified at Wetland 103 (Wetland 103 “Enhancement,” left bank, RM 7.4)
- Within Cedar Grove Natural Area two separate Wetland 37 Enhancement Projects are identified (left bank at RM 8.4 and 8.8).⁶
- The Progressive Investment Revetment Modification project is identified (left bank, RM 9.0 within Cedar Grove Natural Area) to recontour and revegetate a 2,000-foot long revetment.⁷
- Mainstem Recommendation 6 identifies the Wetland 37 site (left bank, RM 8.5-9.0) as a severe channel hazard migration area. Since this site is in public ownership as open space, the typical construction restrictions placed on private owners are already incorporated into management.⁸

WRIA 8 Draft Plan Framework and Preliminary Actions List (WRIA 8 Service Provider Team 2003):

- Cedar Rapids Floodplain Restoration: land acquisition, levee removal, and floodplain restoration on left bank and right bank sides of river at Ricardi Reach.
- Explore options such as easements to protect riparian buffer behind Cook/Jeffries levee

⁶ Lower Cedar Basin Plan, p.4-89, MS 4: Mainstem Habitat Restoration and Enhancement Program

⁷ Lower Cedar Basin Plan, p.4-89, MS 4: Mainstem Habitat Restoration and Enhancement Program, and MS 5: Modify Levees and Revetments.

⁸ Lower Cedar Basin Plan, p.4-90

- Protect pockets of intact riparian forest along the Cedar River Trail and SR 169 such as area across from Cook/Jeffries levee.

Objective: Contain spread of invasive vegetation

Recommendation: Monitor and control invasive vegetation

Park staff should monitor and contain the spread of noxious and invasive plant species that are present at the sites, particularly in those areas where planting projects have occurred. Control is primarily through manual removal of plants by Park staff or organized volunteer groups.

Areas actively restored through a capital improvement project should be rigorously monitored and maintained for at least 5 years following construction. The maintenance and monitoring plan should be designed as part of the project.

Objective: Protect the site from inappropriate public uses

Recommendation: Control litter/dumping and encroachment activities

Park staff should monitor the site for encroachment, dumping, and trash and respond as necessary to maintain a clean and safe property. Monitoring should occur at least monthly.

Park staff should consider installing litter/dumping policy signs on the property if litter activity increases.

Objective: Allow current level of passive recreation opportunities at the sites

Recommendation: Monitor public access

Park staff should note changes in visitor numbers and types of recreational activities at these sites, and observe any noticeable visitor impacts on the ecological values of the site. This information should be reported annually to King County Natural Resource Lands Management Staff responsible for updating site management guidelines.

The current passive uses of walking and nature observation occurring at Cedar Grove-9012 and the very limited use elsewhere in Jones Reach and Ricardi Reach should be monitored and held at current levels. This use level is appropriate given current site topography, access points, and sensitive resources.

Objective: Coordinate management of county-owned sites

Recommendation: Pursue managing all county-owned parcels in Ricardi Reach within one section

WLRD management should discuss managing all King County-owned parcels within a reach within one section. Currently lands in Ricardi Reach are managed by NRL, FHRS, and Roads. Discussion should be initiated within WLRD management regarding NRL and FHRS properties. Further discussion with King County Roads may be necessary to coordinate management between departments.

Implementation

Many of these recommendations regard ongoing site maintenance and short-term management. These short-term recommendations are currently being implemented through actions by the Parks Resource Coordinator. Table 3 presents the time frame and sections responsible for recommendations.

Recommendations that address long-term management will need to be developed when funded and prioritized by DNRP management (within the work programs of NRL, Science, Basin Stewards, CPOSA, FHRS). As new information is gathered for the site, restoration projects may be developed subsequent to SMG adoption. Projects should be consistent with management objectives and approaches described above and in the Ecological Lands Handbook. Funding for restoration projects may be available through Surface Water Management CIP funding or salmon conservation planning funds.

Table 3. Matrix of Management Recommendations

Recommendations	Year	NRL staff	Park Resource Staff	Basin Steward	WLRD Management	WRIA Project Coord.	CPOSA	WEAT	FHRS
Priority One									
Monitor and control invasive vegetation	At least monthly		X						X*
Control litter/dumping and encroachment activities	At least monthly		X						X*
Monitor public access	At least monthly		X						X*
Priority Two									
Perform baseline inventories and assessments	As prioritized and funded	X						X	X
Develop recommendations from inventory information	As prioritized and funded	X		X		X	X	X	X
Pursue collective management of all KC-owned parcels within a reach	As prioritized by management	X		X	X				X
Update Site Management Guidelines	Within at least five years	X	X	X					

*FHRS work is associated with revetments or with Capital Projects in Ricardi and Jones Reaches, some of which occur on Natural Area parcels.

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Appendix 1: List of all parcels in each reach

Parcel acreage derived from Assessor's Database. Properties listed from west to east in each reach. Refer to Figure 2 for Reach and Parcel Identification.

Ricardi Reach			
Assessor's Parcel #	Acreage	Ownership	
242305	-9116	2.92	King County Roads
	-9103	2.10	King County Ecological Land
	-9115	4.89	King County Ecological Land
	-9054	0.26	King County FHRS
	-9062	0.88	King County FHRS
	-9029	0.23	Private Ownership
	-9051	0.46	King County Ecological Land
	-9081	13.10	Private Ownership
Total	24.84	Acres	
Jones Reach			
Assessor's Parcel #	Acreage	Ownership	
192306	-9012	72.77	King County Ecological Land
	-9053	5.00	Private Ownership
	-9034	5.03	Private Ownership
	-9041	0.38	Private Ownership
357020	-0055	4.11	Private Ownership
	-0040	3.51	Private Ownership
	-0030	1.15	Private Ownership
	-0020	2.95	King County Ecological Land
	-0010	1.86	Private Ownership
	-0005	0.61	Private Ownership
	-0006	0.76	Private Ownership
	-0042	1.15	Private Ownership
202306	-0020	2.95	Private Ownership
	-9063	3.50	Private Ownership
	-9064	2.31	Private Ownership
	-9010	2.16	Private Ownership
	-9065	2.16	Private Ownership
	-9023	0.90	Private Ownership
292306	-9042	6.27	Private Ownership
	-9042	1.01	King County Roads
Total	41.14	Acres	