

# Recreational Use of King County's River System

Prepared for:  
King County Department of Natural Resources and Parks  
Water & Land Resources Division

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**King County**

Department of Natural Resources and Parks  
**Water and Land Resources Division**

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This report represents the conclusions and synthesis of the consultant based on a large amount of data collected via written and oral surveys and interviews. Not all comments made by respondents were consistent nor specific enough to be interpreted accurately. Any misrepresentations are the error of the consultant.

## **Acknowledgements**

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Thank you.

Carol MacIlroy



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# 1 Introduction

Recreational use of King County rivers is diverse and growing. From the most advanced whitewater kayakers to the casual inner tuber, King County's rivers have something to offer for everyone. River recreation is also inherently dangerous and the county has a strong interest in understanding how recreational activities intersect with the county's responsibilities for flood protection, salmon recovery, public lands management and other functions. In particular, the use of large wood as a component of bank stabilization and habitat restoration poses a potential risk to river recreation, even though intentionally placed wood is only a very small fraction of the wood that is naturally found in our rivers and streams.

The purpose of this report is to improve the level of knowledge regarding the location, type and seasonality of river recreation in the major rivers within King County. Based on interviews and surveys of knowledgeable individuals and organizations, the report provides a reach-by-reach characterization of river recreation and identifies some of the key factors that influence patterns of use.

The study results confirm that King County has an amazing recreational resource in its river system, including several nationally and internationally recognized river reaches. For example, the North, Middle and South Forks of the Snoqualmie River are regarded as waters of regional and national significance, in addition to being local favorites. These rivers - noted for their wilderness experience and whitewater quality - are part of a broader mix of rivers in King County that supports a variety of recreation opportunities in both the mainstem rivers and larger tributaries. The recent designation of the Pratt River as a Wild and Scenic River; the use of the Cedar River at Landsburg for national kayak qualifications; the sixty commercial flyfishing trips in the month of August on the Snoqualmie River; the hundreds of floaters at Flaming Geyser State Park on a hot day in July; and the international acclaim of the Class V+ "Ernie's Canyon" run on the North Fork Snoqualmie River are all indications of the range of possibilities that exists within King County's rivers.

## 1.1 Report organization

Section 2 of the report provides additional background on the issue of managing King County's rivers and defines the scope and context for this project. Section 3 describes the survey process and terminology. Sections 4 and 5 describe the detailed findings on a river-by-river basis. Section 6 includes recommendations for next steps.

Additional resources as well as survey data are included in the Appendices to this report.

## 2 Background

On November 27<sup>th</sup>, 2007 the King County Council passed Motion 2007-0622 directing the Department of Natural Resources to address public safety concerns in the placement of large wood in the waterways of King County. The task was completed in March 2008 and presented to the County Council in a document titled “Report Addressing Public Safety in Placement of Large Wood in King County Waterways<sup>1</sup>” (hereinafter, King County Large Wood Report). Appendix C of the report describes the protocols utilized by the county in its wood placement projects to ensure consideration of public safety.

As part of the King County Large Wood Report, the county identified a list of primary recreational waterways that includes substantial portions of every major river and several larger tributaries. However, even within these identified areas, recreational uses differ by reach, flow condition and season. Thus, in order to craft policies and practices that address multiple public benefits and agency responsibilities in a riverine context, county staff recognized the need for more detailed information about recreational use patterns.

Carol MacIlroy Consulting was hired by King County’s Water and Land Resources Division, with the support of a grant from the Puget Sound Partnership, to conduct a preliminary survey of recreational use of King County’s river system to fill this gap.

The goal of the recreational use survey was to determine where and when different types of recreational use occur on King County rivers. The survey focused on users and user groups active in King County. A copy of the written survey, as well as a list of survey recipients and respondents, can be found in Appendices A and B.

### 2.1 Current Recreational Trends

A statewide recreation survey conducted by Washington State’s Recreation and Conservation Office (RCO) shows that the popularity ranking of water activities increased from 2002 to 2006. However, the popularity of fishing - included as an activity separate from other water-based recreation - declined during the same period.

The RCO survey generated the following average annual estimates of the frequency of fishing and other water-based recreational use in King County (Table 1). All values have been rounded to the nearest thousand. Frequency denotes the estimated total number of times that individuals within King County engaged in the activity. Note that these estimates combine data for lakes and rivers. Thus, for cross-over categories such as swimming and fishing, it is not possible to extract estimates specifically for rivers:

**Table 1. Annual frequency of water-based recreation in King County**

<b>Activity</b>	<b>Frequency</b>
fish from a boat in freshwater	216,000
fish from a bank, dock, or jetty in freshwater	175,000
swim or wade at a freshwater beach	1,056,000

<sup>1</sup> The Report can be downloaded at the following URL: <ftp://green.kingcounty.gov/transfer/Faegenburg/LW%20Report/>



<b>Activity</b>	<b>Frequency</b>
inner tube or float	334,000
white water raft	12,000
canoe, kayak, row or use another form of hand-powered craft in freshwater	360,000

While it is not possible to develop specific estimates of river recreation due to the combination of all freshwater data (with the exception of the white water rafting category), the RCO demonstrates the popularity of aquatic recreation in King County.

The RCO study notes that the travel patterns associated with recreation have also changed over time. Whereas 10-20 years ago people tended to travel to spend time in the outdoors, more and more people are selecting local parks, rivers and their yards as their first choice for recreation. The shift in pressure to highly localized use could have a significant impact on use patterns over time, with implications for outreach and education strategies, and the design of future surveys.

Easily accessed on line, the RCO data is also broken out by gender, age, seasonality and month. This provides a rich opportunity for further analysis about recreational use. The data tables that quantify these activities are included in Appendix D, a citation for the document is included in Appendix E and the website link is found in Appendix F.

## **2.2 Scope and Timeframe of report**

The purpose of this effort was to describe the spatial and temporal use of King County’s rivers by recreational activity. The background survey and research were conducted during late May and early June of 2009. Within the constraints of a very limited budget and short timeline, the goal was to quickly capture as much data as possible, while also serving as the foundation for strategic choices about next steps.

### **2.2.1 Geographic scope**

The geographic scope of the report is King County. For purposes of the survey, the initial list of recreational rivers was taken directly from the King County Large Wood Report. In addition to the list provided in the report, Issaquah Creek was added to the scope of the study due to its proximity to large population centers and its notable profile with the public.

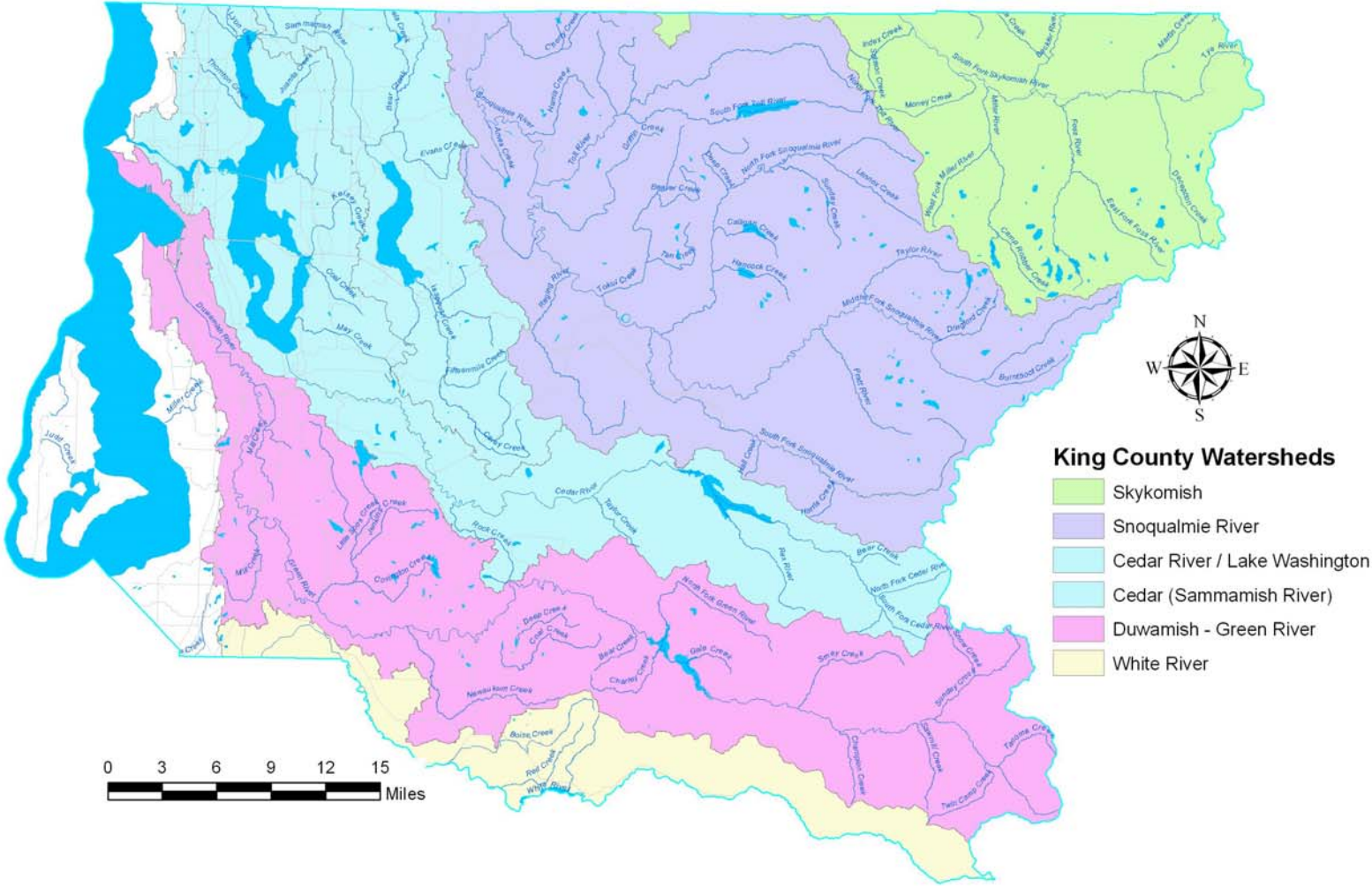
The study focused on five King County watersheds: Skykomish River, Snoqualmie River, Cedar River/Lake Washington, Green River and the White River. The main rivers and forks that comprise these watersheds are noted in Table 2, along with key tributaries. Survey respondents were given the opportunity to identify additional tributaries that are used for recreation. As a result, seven tributaries were added to the original list, all within the Skykomish and Snoqualmie watersheds. These additional tributaries are noted below with the phrase “new addition”. Also, within some of the mainstem rivers, the geographic extent of recreational reaches was expanded from the county’s initial list based on responses to the survey.

**Table 2. Watersheds, rivers and key tributaries included in the survey**

- Skykomish Watershed
  - South Fork, Skykomish River
    - Miller River
    - Tye River - *new addition*
    - Beckler River - *new addition*
    - Foss River and its East and West Forks - *new addition*
    - Money Creek - *new addition*
- Snoqualmie Watershed
  - North Fork, Snoqualmie River
  - Middle Fork, Snoqualmie River
    - Dingford Creek - *new addition*
    - Taylor River - *new addition*
    - Pratt River - *new addition*
  - South Fork, Snoqualmie River
  - Lower Snoqualmie River
    - Lower Tolt River
    - North Fork, Tolt River
    - South Fork, Tolt River
    - Raging River
- Cedar River/Lake Washington Watershed
  - Sammamish River
  - Issaquah Creek
  - Cedar River
- Green River Watershed
  - Green River
- White River Watershed
  - White River
    - Greenwater River

The five major watersheds and river systems are shown graphically in Figure 1. Not all tributaries are easy to distinguish at this scale.

Figure 1. Map of King County watersheds



## **3 Survey Process and Terminology**

### **3.1 Written survey**

A written survey was sent to more than forty individuals who had been identified by county staff as key sources of information due to their personal or professional experience, or their affiliation with key organizations. The list of recipients included representatives of recreational boater organizations, river safety advocates, fishing guides, river rescue personnel, county staff and others. Several respondents forwarded the survey to club members or key colleagues and associates. It is unknown how many people ultimately received the survey. Twenty-nine completed surveys were returned to the consultant. An example of the written survey and a complete list of recipients and respondents are included in Appendix A and B, respectively. Note that the written survey was designed for use with Microsoft Word and has drop-down boxes with standardized responses that will not be viewable in hard copy form.

### **3.2 Interviews**

The consultant conducted seven hours of in-person interviews. The findings from the written survey were compiled prior to the in-person interviews, allowing the interviewer to test the preliminary findings against the experiences of interviewees. King County GIS staff also produced eleven table-sized maps of county rivers to facilitate the interview process.

The availability of results from the written surveys elicited more detailed and informative responses from interviewees. For instance, while a whitewater paddler might refer to a specific reach as “low use” for paddling, he/she may also recognize that the same area is frequently used by swimmers and wading fishermen.

In addition to the in-person interviews, one interview was conducted by telephone.

### **3.3 Defining river segments/reaches**

The question of how to define “reach” was a significant issue in framing the survey. The King County Large Wood Report did not define reaches per se. Rather, the report identified the upstream and downstream termini of the entire presumed recreational extent for a particular river on the basis of river miles (RM). For example, in the case of the Green River, the recreational section includes everything from RM 0 (river mouth) to RM 61 (the location of the Tacoma Headworks facility). The county’s delineation was not useful in soliciting information on the specific location, type and seasonality of use with the fishing, boating and other recreational communities. These users view the river in terms of put-ins, take-outs and other locally-derived references such as “The Club Stretch” or “Ernie’s Canyon”. Ultimately, the consultant utilized the American Whitewater reaches as the starting point for the written survey and the interviews<sup>2</sup>.

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<sup>2</sup> Available at: [www.americanwhitewater.org/content/River/state-summary/state/WA/](http://www.americanwhitewater.org/content/River/state-summary/state/WA/)

This reach definition framework worked well for the boating community, but less well for public safety representatives and for the fishing community who have their own spatial reference points and conventions for river terminology. For example, wading fishermen typically “put-in” and walk upstream; thus, the notion of put-ins and take-outs as defined by boaters does not apply in the same manner. As a result, put-ins and take-outs were renamed simply as access points.

Yet another way of viewing river reaches emerged from river safety and park management personnel, who often characterize each river in terms of “beer beaches”, swimming holes, and high trash and garbage areas.

To the extent possible, all of the disparate ways of defining river reaches were captured in the survey results, even though some did not fit neatly within the American Whitewater structure. A more comprehensive listing of access points is provided separately from this report to the King County staff as a result of the interviews.

### **3.3.1 Reach classification**

River reaches can also be classified according to a standardized rating of difficulty for boating purposes. American Whitewater’s nationally accepted classification system is used as the basis for most whitewater guidebooks and is widely accepted by all whitewater and in-river enthusiasts. Appendix H defines the class of each river reach in the survey. The survey also included a question about the respondent’s whitewater skill level.

## **3.4 Terminology: High, Medium, Low, and Infrequent use**

Respondents were asked to rate the level of use of specific river reaches as High, Medium, Low, Infrequent or None for a particular recreational activity. The distinction between Low and Infrequent emerged from initial interviews and reflects the following difference: Low use refers to a fairly constant but low level of use, while Infrequent refers to more sporadic use that may be highly dependent on specific conditions. All terms were meant to capture relative levels of use in the perception of the respondent, rather than a quantitative definition of user volume.

## **3.5 Terms for recreational use and type of craft**

The written survey and the report findings characterize recreational use according to the categories in Table 3.

**Table 3. Recreational river activity categories.**

<b>Category</b>
Whitewater Kayaking/Canoeing
Flatwater Kayaking or Canoeing
Floating: inner tubes or other floating devices
Fishing by boat/craft

<b>Category</b>
Birding by boat
River rafting
Motorized boating
No craft: swimming
No craft: wading fishing

### 3.6 Definition of seasonality

Survey respondents were asked to identify specific seasons that correspond with each rating of river use. Certain types of uses are prevalent only during the warm days of summer, while others are primarily dependent on the flow level within a specific reach. The influence of flow level and temperature are discussed in more detail in Section 4. The seasonal clusters included in the survey are listed in Table 4.

**Table 4. Seasonality categories applied in the survey.**

<b>Seasonality categories</b>
Fall
Fall and Spring
Fall through Spring
Spring
Summer
Summer and Fall
Winter

## 4 Key Findings

### 4.1 Recreational use is highly variable and dependent on key factors

King County’s rivers are as diverse as its citizens. It is clear that there is no easy way to summarize which users use which areas at what times. The rivers used by recreational users vary from the Duwamish, an industrialized estuary, to Dingford Creek, a series of rock waterfalls high up in the Cascade range. Yet, this range of diversity is not the only factor that influences which rivers are used, by whom and during what season. The following factors significantly influence the type, seasonality and location of use.

#### 4.1.1 Ambient air temperature

Ambient air temperature is a key factor that influences river use by most swimmers, inner tubers and other recreational floaters. The level of use by fishers and paddlers of all types are less affected by air temperature. Due to the large number of people that participate in river recreation only during warm weather, this factor drives the highest overall volume of use to the summer months.

#### **4.1.2 River flow levels**

For paddlers and many fishers, the flow level (typically expressed in cubic-feet-per-second, or cfs) is a primary consideration. A known flow level tells an informed user first and foremost if the river is flowing at a level that safely allows put ins and take outs, and also places known hydrologic features (such as specific rapids) within the classification system provided by American Whitewater. For instance, a Class III stretch of water may become a Class V rapid at flood stage. Conversely, low flows can result in being grounded and/or preclude use of a boat or craft. Flows also play a role in turbidity (i.e., cloudiness of the water) which is a key factor for fishermen.

The combination of high air temperature and high flow was frequently noted as a very high-risk scenario for casual recreational users. Multiple respondents concerned with river safety mentioned the extremely high risk situation that occurs roughly once per season when a very hot day occurs over a weekend, especially early in the season when the spring snowmelt is in full force. Many inner tubers and floaters are not aware of the importance of understanding flow levels and the risk associated with the very cold and swift waters of springtime.

#### **4.1.3 Access**

The importance of access in determining use levels is significant. Several comments were made about reaches of rivers that would see much higher use if access were improved.

Key factors related to access include:

##### Driving Proximity

The distance from population centers influences the level of use, though given the relative accessibility of most of the rivers in King County, this factor seems to be less important than others described below. The accessibility of the Middle Fork Snoqualmie to after-work whitewater paddlers is one example of use that is driven by quick access from the Seattle population core.

##### Proximity of parking to the river and access point features.

The acceptable distance between ones car and the river has different meanings to different users.

- A light solo canoe weighs approximately 53 pounds without gear and up to 100 pounds, while kayaks range from 25 to 35 pounds with gear. While kayakers on the North Fork Snoqualmie carry their boats up to a mile and half to access the river, a distance of this magnitude understandably limits access for most users.
- Paddlers and canoers consider the steepness, length and ease of each access point.
- Drift boats need a boat ramp.
- A wide put-in is desired by rafters as a raft must be carried by people on both sides.

- Bank and wading fishermen need a trail to the river and prefer access points that make a loop for easy car drops or hitchhiking.
- Many respondents noted that all roads, railroads, bridges, parks and trails are regarded as public access points to a river, whether formal or not.
- Safe and available parking close to the access point is another factor. Several respondents noted use of the Tacoma Public Utilities lot on the Green River rather than the Headworks access point because the lot is considered safer.

### Road closures

Currently, the Middle Fork Snoqualmie Road is closed due to landslides near the Lake Dorothy Road and flood damage to the Taylor River bridge. These closures mean that high use areas like portions of the Middle Fork Snoqualmie River become inaccessible and recreational users shift to other parts of King County.

### Land ownership

Several of the rivers in King County are largely held within private ownership (mostly in timber landholdings) and have access points that are either not accessible or the distance between access points precludes day trips. Many users noted that several river and creek systems would see much higher use levels with better access.

### Cost

Lastly, costs associated with access points may alter use patterns in certain areas. Reportedly, when State parks instituted a \$5 day use fee, users along the Green River moved to other access points to avoid the fee.

#### **4.1.4 Trip duration, distance and flow**

The popularity of access points for boaters is in part dependent upon the velocity of the river during a given season and the distance between access points. For instance, kayakers frequent spots on the Middle Fork Snoqualmie River that can be run after work during the long hours of spring and early summer. As the flows change and the daylight hours shorten, the levels of use at various access points may shift. Sections such as the Lower Snoqualmie River below Fall City see low use because it may take more than a day to float between scarce access points. Consequently, the primary use of the Lower Snoqualmie is motorized boating which is less limited by travel distance.

#### **4.1.5 Quality of the resource**

Many respondents cited the overall aesthetic of the river as a critical component to determining the level of use. For some respondents this includes a sense of wildness, mountain views, and wildlife. A specific example is the growing popularity of the Pratt River for fishing since its recent designation as a Wild and Scenic River. Additional highly sought after attributes are pools for swimming, fish available for fishing, the temperature and color of water, and the ratio of flat water and whitewater. Rivers and reaches with a large amount of wood are used less frequently by the boating community



while these same rivers and reaches saw moderate to high use by wading, floating and even boating anglers.

#### **4.1.6 Fishing seasons**

Fishing seasons range from year-round opportunities to distinct and highly restricted seasons and locations. Several respondents wondered about the prevalence of poaching and other illegal fishing in certain stretches of the Green and White Rivers. It is unknown from this initial work what role, if any, enforcement has on fishing use and timing. This project did not attempt to synthesize the current fishing regulations by river reach, but information relevant to the survey was noted where respondents provided that level of detail.

### **4.2 High-volume vs. high-value river reaches**

Both the volume of river use and the perceived value of unique locations are important considerations for river management. During the interviews it became clear that respondents used the term “High Use” to indicate a combination of meanings. One meaning ascribed to High indicated a high number of people frequented the reach or access point. A second meaning spoke to the value and ultimately the importance of a place to the people who use it. For example, places like the white water slalom course just below Landsburg Dam and the North Fork Snoqualmie River see a fairly low number of actual users, but these locations have a very high local and national profile and perceived value. Other places like Blue Hole on the Middle Fork Snoqualmie River near the city of North Bend and portions of the Green River see a high volume of use and have a high local value.

### **4.3 Current volume of use in King County rivers**

While there was some variation in reported use and seasonality, respondents were highly consistent in their description of use of King County’s rivers and reaches. Detailed findings are described in Section 5. Overarching findings are summarized below.

#### **4.3.1 Proposed tiers of recreational levels of use by volume.**

The following four-tier system divides the County’s major rivers according to the level of overall recreational use based on the written survey and interviews. The level of highly-localized recreational use is likely underrepresented in the results due to the fact that most of the respondents view King County’s river systems from a regional use perspective. This is a significant shortcoming of the study design and funding constraints. Localized, on-the-ground surveys or other intensive research methods would help to improve the overall characterization of recreational use.

The highest volume of recreational use likely occurs in areas where whitewater sports, recreational use like swimming and tubing and fishing all converge. These areas were consistently reported.

Tier One: highest volume of use by multiple user groups in multiple seasons

- Green River from Kanaskat-Palmer State Park to Flaming Geyser State Park.

Tier Two: high use by multiple user groups, less volume than Tier One

- Snoqualmie River from Snoqualmie Falls to Fall City
- Middle Fork Snoqualmie River

Tier Three: moderate to high use by one recreational group and possibly low to moderate use by other groups.

- South Fork Snoqualmie River
- South Fork Skykomish River (note the highest level of use in the Skykomish River lies in Snohomish County)
- Lower Tolt River.
- Cedar River

Tier Four: infrequent to moderate use by one or two recreational user groups

- Forks of the Tolt River
- Raging River
- North Fork Snoqualmie River
- Snoqualmie River mainstem below Fall City
- White River
- Issaquah Creek

#### **4.4 Seasonality of recreational use**

The seasonality of use varies significantly, even between different reaches of the same river. Nevertheless, the study results support the following general observations:

- Spring supports heavier use by whitewater rafters and whitewater kayaks due to higher flows.
- Summer and fall seasons support more kayaks, canoes and fewer rafts.
- Summer brings out swimmers, waders and tubers and likely represents the highest volume of use during the entire year.
- Winter and spring feature heavier use by drift boat fishermen, especially on the Skykomish and Snoqualmie Rivers, while wading fishermen are more prevalent in the summer and fall.

- Motorized craft and jet skis are most popular in the summer months and extend slightly into late spring and early fall.

## **4.5 Recreational use groupings**

Based on the results of interviews and the survey, recreational river users appear to cluster into three groupings: safety advocates, planned users and spontaneous users. While these are admittedly coarse and often overlapping categories, the groupings may serve a purpose in designing future outreach, education and research efforts as they reflect potentially common priorities, concerns and needs. These categories were created by the consultant based on comments from interviews and feedback in the written surveys.

### Safety Advocates

This group is comprised of 1) highly trained and skilled kayakers, canoers and rafters who lead trips, play leadership roles in organized clubs or teach rescue and safety techniques to others, 2) professional search and rescue staff and 3) citizens concerned about safety who have a deep interest in King County's rivers. These people are often strong advocates for education and outreach and are concerned that people using King County's waterways understand the risks and are protected from preventable hazards. This group is concerned with large wood placements, lack of signage at put-ins and unsupervised juvenile and young-adult use of the rivers.

### Planned Use (float fishing, kayaking, canoeing, organized trips, commercial rafting and fishing)

This group is comprised of people who plan trips in advance, pay close attention to water levels, wait for the right time to execute a specific trip and have specific recreation goals and objectives. This category includes members of organized groups of fishermen, paddlers and commercial businesses. They are often part of a recreation-focused network, whether formal or informal. They tend to be committed to their activity and are vocal advocates for access. Most respondents in this category appeared to exhibit a high standard of personal safety and awareness of personal responsibility for the risks they take while on the river. This group appears divided on how to address safety concerns regarding uninformed and/or ill-advised recreation in King County's rivers.

### Spontaneous Use (fishing, rafting, tubing, swimming, floating, motorized boating)

This group comprises people who respond spontaneously to nice weather or to otherwise favorable conditions. They likely frequent known locations and tend to go with friends and family. Most individuals in this group are likely not part of an organized recreational group; as a result, while they may be impacted by changes in access or other factors, they may be less informed and less vocal about their interests. This group is likely the largest user group for King County's rivers. The information presented in Section 5 includes high-use locations where user interviews or other on-site information could be gathered to determine volumes and patterns of use, levels of safety awareness, affiliations, and trends. Portions of the Cedar River, Snoqualmie River and Green River are potential starting places for such efforts.

## 5 Key Findings by Rivers and Reaches

The key findings are presented for each of the five major watersheds that lie within King County. For ease of recognition, the tables have also been color coded as noted.

- Skykomish River Watershed (Blue)
- Snoqualmie River Watershed (Yellow)
- Cedar River/Lake Washington Watershed (Brown)
- Green River Watershed (Green)
- White River Watershed (Gray)

Each section begins with a brief overview of the river and general observations, followed by a table of findings. The table describes the level (or volume) of use, user group, season and any key findings by river reach. The table rows are organized roughly in an upstream-to-downstream direction. The start and end points of each reach refer to known access points. Additional access points are noted where relevant. Note that a full listing of access points was transmitted to County staff and may not appear below. Many of the access points are taken from American Whitewater's website<sup>3</sup> and can also be found, along with their longitudinal and latitudinal coordinates, in Appendix I. The findings presented in the tables are an integration of comments from several sources as well as comments from a single, well-informed respondent.

### 5.1 Skykomish Watershed

The Skykomish River Watershed is located in the northeastern corner of King County and lies largely within Snohomish County. However, a substantial portion of the South Fork Skykomish falls within King County. Four tributaries to the South Fork Skykomish are also reportedly used for recreation and are discussed below.

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<sup>3</sup> [www.americanwhitewater.org/content/River/state-summary/state/WA/](http://www.americanwhitewater.org/content/River/state-summary/state/WA/)

### 5.1.1 South Fork Skykomish River

The South Fork Skykomish River flows from King County into Snohomish County. This fact was a source of confusion to many respondents because few knew the location of the county line. Big Eddy, which is an access point in Snohomish County, was often cited as one of the highest volume uses in the area for whitewater sports such as kayaking, canoeing and rafting. Anglers and others often referred to Sunset Falls and other locations outside of King County.

Nevertheless, the portion of the river within King County also features use by the whitewater communities as well as significant use from the fishing community. Angler (wading and floating fishermen) are highly active in this area.

River Reach	Level of Use	User Group	Season	Key Findings
Beckler River to bridge above Baring (Class II)	Low	Kayak/Canoe	Spring through Fall	SF Skykomish reaches in Snohomish County see high use by the kayak community.
Same as above	High	Angler	Late summer to fall	
Money Creek Campground	Unknown	Kayak/Canoe		Used as an access point.

### 5.1.2 Miller River - Tributary to Skykomish

The Miller River is the first major tributary to enter the Skykomish River west of the City of Skykomish. Entering from the left bank, this tributary to the Skykomish River is used infrequently by the whitewater community. The East and West Forks of the Miller River are cited in American Whitewater's list of rivers and rated respectively as Class V and Class V+, but were not cited by any respondents in this survey.

River Reach	Level of Use	User Group	Season	Key Findings
East Fork to NE Old Cascade Highway (Class IV)	Infrequent	Kayak/Canoe	Unknown	

**5.1.3 Tye River - Tributary to Skykomish – New Addition**

The Tye River joins with the Foss River to become the South Fork of the Skykomish River east of the City of Skykomish. Highway 2 follows the Tye River before heading up to Stevens Pass. The Tye River and the Foss River see slightly more use than the Money Creek and Miller River tributaries by the paddling community. There was no report of fishing usage.

River Reach	Level of Use	User Group	Season	Key Findings
Surprise Creek to Alpine Falls – Upper (Class V)	Low to infrequent	Kayak/Canoe	Unknown	
Alpine Falls to Beckler River – Lower (Class IV+)	Low to infrequent	Kayak/Canoe	Unknown	

**5.1.4 Beckler River - Tributary to Skykomish – New Addition**

The Beckler River enters the South Fork of the Skykomish River on the right bank east of the City of Skykomish, flowing from Snohomish County into King County. The put-in is in Snohomish County with a significant portion of the run in King County. The use is low to infrequent for kayakers and canoers. Anglers (wading and floating fishermen) report high use of this area. The extent of their use is unclear from the information provided through interviews.

River Reach	Level of Use	User Group	Season	Key Findings
Beckler River	High	Angler	Late Summer to Fall	High use is partially due to availability of camping and aesthetic of the area.
Rapid River to the South Fork Skykomish River (Class II-III)	Low to infrequent	Kayak/Canoe	Spring	

**5.1.5 Foss River and Forks - Tributary to Skykomish – New Addition**

The Foss and Tye rivers converge east of the City of Skykomish to become the South Fork of the Skykomish. The Foss River is reportedly used by both kayakers and anglers. Kayakers use the portion below the confluence of the forks (West and East) and the fishermen use the tributaries to the mainstem.

River Reach	Level of Use	User Group	Season	Key Findings
Tributaries to the Foss	High	Angler	Unknown	
Forest Road 68 Bridge to Highway 2 Bridge (Class IV+)	Low to infrequent	Kayak/Canoe	Unknown	

### 5.1.6 Money Creek - Tributary to Skykomish – New Addition

Money Creek enters the Skykomish River on the left bank below the Miller River. Money Creek campground is a popular site for recreational use. This river is used infrequently by the whitewater community, similar to the nearby Miller River. Angler use was not reported.

River Reach	Level of Use	User Group	Season	Key Findings
Upstream of Money Creek Road Bridge to Confluence with South Fork Skykomish (Class IV-V)	Infrequent	Kayak/Canoe	Unknown	

## 5.2 Snoqualmie Watershed

The Snoqualmie River Watershed drains a significant portion of King County and is a popular recreational draw. Made up of three forks that converge a short distance above Snoqualmie Falls, the Snoqualmie River connects the cities of North Bend, Snoqualmie, Duvall and Carnation, as well as the unincorporated town of Fall City. Tributaries included in this survey include the Raging and Tolt Rivers in the lower river below the falls, in addition to several tributaries to the Middle Fork Snoqualmie River.

### 5.2.1 North Fork Snoqualmie River

The North Fork Snoqualmie merges with the Middle Fork Snoqualmie River at the Three Forks Natural Area near North Bend and above Snoqualmie Falls. Ernie’s Canyon is a nationally acclaimed Class V whitewater run. However, most recreational portions of the river are predominantly held within private timber ownership and have very limited access. The lower portion of the North Fork

Snoqualmie River near the Three Forks Recreational Area sees high reported use from swimmers and low to moderate use from anglers.

River Reach	Level of Use	User Group	Season	Key Findings
Big Creek to Spur 10 Bridge (Class III)	Infrequent- Low	Kayak/Canoe	Spring and Fall	Limited access precludes high levels of use. Likely a very popular run if access were improved. The recreational use denoted by King County extends beyond the point referenced by respondents.
Spur 10 Bridge to 428th Street Bridge -- Ernie's Canyon (Class V+)	Infrequent	Kayak/canoe	Spring and Fall	National draw for this Class V run. Paddlers carry kayaks and canoes in 1 ½ miles to run this stretch.
Lower North Fork	Low to Moderate	Angler	Unknown	River is so constrained it is not floated by anglers but sees some use from banks and from wading at low flows.
Confluence Parking Lot	High	Angler and Recreational swimming	Summer	The parking lot at the confluence sees high use in the summer.

### 5.2.2 Middle Fork Snoqualmie River

The Middle Fork of the Snoqualmie River has high reported use for whitewater sports, wading, floating and fishing. The Pratt River system was added to the list of recreational river stretches, as was Dingford Creek and the upper portion of the Middle Fork Snoqualmie River itself. The Taylor River was also added as an angling destination. While the Middle Fork is technically open year round to fishermen, fishing doesn't really begin until the flow at Tanner is 1,000 cfs, typically in mid-July<sup>4</sup>. On the Middle Fork Snoqualmie, this level of flow is associated with reduced turbidity (cloudiness) and is also an indicator that it is possible to enter and exit the river safely. This is one of the most heavily used systems in King County and is frequented by all the major whitewater clubs and is used by fishing companies as well as recreational fishermen.

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<sup>4</sup> USGS gage #12141300



River Reach	Level of Use	User Group	Season	Key Findings
Hardscrabble Creek to Tanner Road	Infrequent	Inner tubers and floaters	Summer	
Hardscrabble Creek to Burnboot Creek (Class V)	Infrequent	Kayak/Canoe	Unknown	Road is currently washed out at Taylor Bridge which will affect use of these areas.
Burnboot Creek to Taylor River -- Upper-Upper-Middle (Class II-III (IV))	Low to Infrequent	Kayak/Canoe	Spring and Fall	Road is currently washed out at Taylor Bridge which will affect use of these areas. Cascade Land Conservancy (CLC) just purchased a property that allows access just above Taylor. This new run is spectacular and will likely grow in acclaim and popularity.
Same reach as above.	Low	Angler	Year round	Use is between the confluence with the Taylor and the new CLC property.
Taylor River to River Bend Access	High	Angler	Year round	This portion and the portion higher up from the Middle Fork Natural Area to Granite Creek estimated at 1,000 people a day at the high point.
Taylor River to King County Concrete Bridge/Granite Creek -- Upper Middle (Class II)	Medium to High	Kayak/Canoe	Spring and Fall	One comment stating this stretch as Low use.
Concrete Bridge/King County Granite Creek to Tanner --Middle-Middle (Class III-IV)	High	Kayak/Canoe/Raft	Spring through Fall/Year Round	Several statements about season.
Mine Creek (DNR)	Moderate to High	Kayak/Canoe/Raft	Spring through Fall	This access point is used by rafters as the access is easier than Granite Creek. It is also used to shorten the Middle-Middle run for after work kayak trips or if the flow is low/slow.

River Reach	Level of Use	User Group	Season	Key Findings
Northeastern tip of Middle Fork Snoqualmie Natural Area upstream to Granite Creek/Concrete Bridge	High	Wading fishermen		This portion and the portion higher up from Taylor River to the River Bend Access estimated at 1,000 people a day at the high point.
Two spots where Lake Dorothy Road comes close to the Middle Fork between Mine Creek Access (DNR) and Granite Creek Access	High	Swimmers and waders	Summer	Champion Beach (DNR Lands) and a swimming hole exist in this stretch.
Tanner to North Bend -- The Club Stretch (Class II)	Medium-High	Kayak/Canoe/Raft	Vary	Use descriptions vary from year round to spring and fall to spring through fall.
Blue Hole	High	Swimmers, waders and floaters	Summer	Several swimming hole areas in this portion of the river in addition to Blue Hole.
North Bend to Three Forks/Old Norman Bridge Site	Medium - High	Swimmers, waders and floaters	Summer	This information as reported is unclear as to level of use and extent of use between Blue Hole and Three Forks. High use is reported at Three Forks.

### 5.2.3 Pratt River – Tributary to the Middle Fork Snoqualmie River – New Addition

The Pratt River enters the Middle Fork Snoqualmie River from the left bank. The river just received a Wild and Scenic River designation and is reported as likely increasing in its appeal for fishing. The river is infrequently used by whitewater enthusiasts. Angler use is high.

River Reach	Level of Use	User Group	Season	Key Findings
Kaleetan Creek to Middle Fork Snoqualmie (Class IV)	Infrequent	Kayak/Canoe	Unknown	
Same reach as above.	High	Angler		Specific location of use on the Pratt not known by the consultant at this time.

#### **5.2.4 Taylor River – Tributary to the Middle Fork Snoqualmie River – New Addition**

The Taylor River enters the Middle Fork Snoqualmie River from the right bank. The forest road that follows the Middle Fork Snoqualmie River up the valley crosses the Taylor river approximately one mile upstream of the Middle Fork Snoqualmie River. This site is the start of the Upper Middle Fork Snoqualmie River whitewater run. The bridge crossing the Taylor has washed out. This site is suggested to be very popular in the fishing community because it combines hiking with recreational fishing. It is unknown if the wash-out affects the put-in at this site or only the sites further up the Middle Fork Snoqualmie River.

<b>River Reach</b>	<b>Level of Use</b>	<b>User Group</b>	<b>Season</b>	<b>Key Findings</b>
One to two miles above confluence with Middle Fork	Moderate	Wading Fishermen	June through October	Availability of camping and trails and aesthetic of the place make this site popular. Estimates are about 50 people per day on this section.
See Middle Fork Snoqualmie Taylor to Concrete Bridge Reach				This reach actually begins on the Taylor River and continues on the Middle Fork of the Snoqualmie.

#### **5.2.5 Dingford Creek – Tributary to the Middle Fork Snoqualmie River – New Addition**

Dingford Creek is a tributary to the Middle Fork Snoqualmie that feeds into the river from the Alpine Lakes Wilderness Area. It enters the river from the right bank. A short video clip of a creek boater navigating the waterfalls on this system was provided to give an example of the type of recreational use that is beginning to be seen in the most rugged and isolated portions of King County. This video can be viewed at: <http://www.youtube.com/watch?v=5pvMIXSTnNY>. There was no reported angler use of this system.

<b>River Reach</b>	<b>Level of Use</b>	<b>User Group</b>	<b>Season</b>	<b>Key Findings</b>
Below Goat Creek to Middle Fork Snoqualmie River (Class V+)	Infrequent	Kayak/Canoe		

### 5.2.6 South Fork Snoqualmie

The South Fork of the Snoqualmie River follows I-90 east and joins the other forks at the Three Forks Natural Area. The river passes through the city of North Bend. The river is used by whitewater kayakers, canoers, fishermen and swimmers. It is reported that as the river enters and passes through North Bend the use levels drop to infrequent. It is not clear what causes this drop in use: access, quality of the river, lack of swimming holes or if this drop is due to a lack of accuracy in reporting.

River Reach	Level of Use	User Group	Season	Key Findings
I-90 Exit 52/Franklin Falls to Denny Creek Campground -- Fall in the Wall (Class IV-V)	Moderate	Kayak/Canoe	Spring	
Denny Creek Run (Class Unknown)	Low	Kayak/Canoe	Spring	
Tinkham Road Crossing up to Mason Creek	Low to Moderate	Wading Fishermen	Year Round; Highest use June to October	
Same reach as above.	Moderate to High	Swimming and wading	Summer	
Same reach as above.	Moderate to High	Inner Tubes and floating	Summer	
Eastern end of Ollalie State Park to Twin Falls State Park	High	Wading and Floating Fishermen	Unknown	
Twin Falls State Park to 436th Street Bridge (Class II+)	Medium	Kayak/Canoe	Spring and Fall	
Same reach as above.	High	Swimmers and waders	Summer	It is unclear if this also includes inner tubers and floaters.

River Reach	Level of Use	User Group	Season	Key Findings
436th Street Bridge to Three Forks Natural Area	Infrequent	Unknown	Unknown	This comment was made by several respondents but it is unclear to which users groups it refers.

**5.2.7 Lower Snoqualmie River (below Three Forks Natural Area and above Snoqualmie Falls)**

The portion of the Lower Snoqualmie from below the Three Forks Natural Area to above Snoqualmie Falls backs up due to the dam above the falls. This creates a slack section that appears to preclude much recreational use. It is unknown how much use this section sees from bank fishermen or swimmers.

River Reach	Level of Use	User Group	Season	Key Findings
Three Forks Recreational area to above Snoqualmie Falls	Infrequent	Kayak/Canoe	Unknown	
Same reach as above.	Infrequent	Inner tubers and floaters	Summer	

**5.2.8 Lower Snoqualmie River (below Snoqualmie Falls)**

The Lower Snoqualmie River is characterized by high use immediately below Snoqualmie Falls by anglers, swimmers, floaters, kayakers, canoers and rafters. Many cited this area below Snoqualmie Falls as the second highest use of any river reach in the County following the Green between Kanaskat and Flaming Geyser State Parks. This high-use designation marks the confluence of multiple user groups in addition to a high volume of use within each user group category. Roughly 15 miles downstream, the area between Carnation and Duvall has a lack of access prohibiting day use activities by anglers, floaters and kayakers/canoers. Several respondents suggested the possibility of creating an access point at the 124<sup>th</sup> Street bridge near Duvall.

The uses of the river appear to become more specialized as one moves downstream. Anglers (wading and floating fishermen) have moderate use that drops to low and then infrequent as motorized use picks up downstream of the Tolt River and access becomes more difficult. The extent of localized use of the river for swimming, wading, floating or bank fishing is unclear, although the river is

flanked by Tolt River – John MacDonald Park near Carnation and McCormick Park in Duvall. Both are actively used by swimmers during the summer months.

River Reach	Level of Use	User Group	Season	Key Findings
Snoqualmie Falls/Powerhouse to Plum’s Landing (Class II+)	High	Kayak/Canoe	Spring through Fall (Year Round)	One of the highest use areas in King County. Highest use is spring and fall.
Same reach as above.	High	Tubers and Floaters	Summer	One of the highest use areas in King County.
Same reach as above.	Low to Moderate	Tubers and floaters	Spring and Fall	Depends on temperatures/flows.
Tokul Creek	High	Kayak/Canoe	Spring and Fall	Slightly less use as an access point than Powerhouse and Plum’s Landing.
Same reach as above.	High	Anglers		
Tokul Creek to Fall City	High	Floating Fishermen		Unclear if wading fishermen put in at Fall City walking upstream to Tokul.
Snoqualmie Falls/Powerhouse, Tokul Creek or Plum’s Landing to Fall City	High	Tubers and Floaters	Summer	One of the highest use areas in King County.
Snoqualmie River Richter #2 Access to Confluence with Tolt	Moderate	Motorized Boat	Unknown	
Same reach as above.	Low	Wading Fishermen	Unknown	
Same reach as above.	Low	Floating Fishermen	Unknown	
Confluence with Tolt to Duvall	Infrequent	Wading Fishermen	Unknown	Levee system and private lands prevent access.
Same reach as above.	Infrequent	Floating Fishermen	Unknown	Levee system and private lands prevent access. Distance between access points prevents reasonable day-long float trip. Motorized boat traffic disrupts fishing.
Same reach as above.	Moderate	Motorized boats/ jet skis	Summer	

River Reach	Level of Use	User Group	Season	Key Findings
Duvall	Unknown	Bank Fishermen	Unknown	Possible high use of bank fishermen in the Duvall area given access points and proximity to a population center.

### **5.2.9 North Fork Tolt River – Tributary to the Snoqualmie River**

The North Fork of the Tolt River lies largely within private property and locked gates make access difficult. It is also a Class IV-V+ run limiting its appeal to most boaters, anglers (wading and boating) and floaters.

River Reach	Level of Use	User Group	Season	Key Findings
Above Yellow Creek to South Fork Tolt River (Class IV-V+)	Infrequent	Kayak/Canoe	Unknown	Land is privately held and access is limited by gates.

### **5.2.10 South Fork Tolt River – Tributary to the Snoqualmie River**

The South Fork of the Tolt River lies mostly within private timber property and – like the North Fork - locked gates make access difficult. It is also a Class V run limiting its appeal to most boaters, in-water fishermen and floaters.

River Reach	Level of Use	User Group	Season	Key Findings
Bridge to Confluence with NF Tolt River (Class V)	Infrequent	Kayak/Canoe	Unknown	Land is privately held and access is limited by gates.

### **5.2.11 Lower Tolt River – Tributary to the Snoqualmie River**

The Lower Tolt River extends from the confluence of the North and South Forks of the Tolt River to of its confluence with the Snoqualmie River south of Carnation at Tolt River-John MacDonald Park. This stretch of river has low reported use by boaters. The lower portion of the Lower Tolt River sees high use by anglers and is a popular spot to learn how to fly fish. Tubing is also popular along the lower reaches in the summer months. One respondent expressed concern about the restoration work occurring in the area and its potential impact on boater access.

River Reach	Level of Use	User Group	Season	Key Findings
Tolt River Road near Carnation to Snoqualmie River (Class II)	High	Wading Fishermen	Late Summer –Fall	
Same reach as above.	Low	Canoe/Kayak	Spring through Fall	One report of high use during the summer by a kayaker but type of use is unknown.
Same reach as above.	Medium	Tubers and Floaters	Summer	

### 5.2.12 Raging River – Tributary to the Snoqualmie River

The Raging River is a left-bank tributary to the Lower Snoqualmie with the confluence located at Fall City. The Raging River’s headwaters flow from Rattlesnake Mountain before passing under I-90 near the town of Preston. The river was reported to be a “flashy” system (i.e., flows change rapidly) and to have a lot of wood in the river channel. Reports varied about angler use ranging from Unknown to High.

River Reach	Level of Use	User Group	Season	Key Findings
Highway 18 to Preston (Class III+)	Low	Kayak/Canoe	Fall	Flow fluctuates rapidly. A lot of wood.
Preston to Fall City (Class III+)	Low	Kayak/Canoe	Unknown	Flow fluctuates rapidly. A lot of wood.
Raging River	Unknown- to High	Wading Fishermen	Unknown	Several reports of wading fishermen
Raging River	Moderate	Swimming	Summer	One report of the predominant use of the Raging River being swimmers. However, flows are extremely low and swimming locations likely very limited and localized.

### 5.3 Cedar River/Lake Washington Watershed

The Cedar River/Lake Washington Watershed lies in the center of King County and connects Lake Sammamish and Lake Washington to Puget Sound. For this survey the Sammamish River, Issaquah Creek and Cedar River were included.



### 5.3.1 Sammamish River

The Sammamish River drains out of Lake Sammamish on the north end and into Lake Washington on the north end. The river (often referred to as the Sammamish Slough due to its typically low velocity and lack of rapids) was reported by most as an un-aesthetic, flat river with very low appeal compared to other King County waterways. Very little was reported known about the system by regional boaters. American Whitewater does not list it as a river for paddling on their website. However, anecdotal knowledge suggests that the Sammamish River is utilized during the summer months in particular to a moderate degree by casual, flat-water paddlers. Low reported use may be an artifact of the study design. Anglers cited infrequent to low use during the Sockeye season.

River Reach	Level of Use	User Group	Season	Key Findings
Sammamish River	Unknown	Flatwater canoe and kayak	Unknown	Few survey results say predominant use.
Same river as above.	Infrequent to low	Anglers	Seasons vary based on the run. Sockeye opening will draw larger numbers	Fished less than the Cedar. Potentially sees local use that could be explored. Highest numbers likely in the 100 per day range on the entire system. Not a regional draw.
Same river as above.	Unknown	Motorized boat use	Unknown	One report of motorized use.

### 5.3.2 Issaquah Creek

Issaquah Creek begins at Taylor Mountain and stretches to the south end of Lake Sammamish. Very few people commented on its use. When asked, most respondents stated they had no experience on the system and could not comment. Written survey results had a few more responses. American Whitewater does not list it as a river for paddling on their website. Two comments were received that the system was not deep enough to boat and that the flow levels could be so low as to walk easily at ankle depth. Also comments were made that the flows were flashy and peaked suddenly. Localized use for swimming, floating, and fishing is unknown. Lake Sammamish State Park is a 512 acre park that surrounds Issaquah Creek as it enters Lake Sammamish. The state park hosts 1.2 million visitors annually per the Parks Commission’s webpage. Issaquah Creek is also regionally known for its hatchery and its accessibility for viewing returning salmon runs. It is unknown how these attributes relate to actual in river uses.

River Reach	Level of Use	User Group	Season	Key Findings
Issaquah Creek	Unknown	Flatwater kayak or canoe	Unknown	

### 5.3.3 Cedar River

The Cedar River enters the southern end of Lake Washington near Renton. Located just outside of Renton and off of the 1-405 corridor, the Cedar River is minutes away from the largest population center in the state - the greater Seattle/Bellevue area. The portion of the Cedar just below Landsburg Dam is a high profile site for national kayak qualifications and a year-round kayak slalom course. This location, however, sees a low number of devoted and vocal users. The top portion of the river is a Class II whitewater run when the flows are high. In the summer flows can be so low that people have to get out and walk portions.

The Cedar River is paralleled by Highway 169 and the Cedar River Trail and has numerous and easy access points. The highway and trail system draw people from all over King County so that the river is appealing to both local and regional users. One resident who lives on the river informally counted 200 inner tubers floating past her deck one summer day. There are no known studies that quantify the use of this system.

Fishing on the Cedar was closed for ten years and has been open for the last four. The fishing window is currently from early June to the end of August. This presently results in a pulse of fishing pressure on the system. It is unclear what will happen with future fishing seasons as many stocks across the state continue to be depressed.

River Reach	Level of Use	User Group	Season	Key Findings
Carco Park to Landsburg	Infrequent to Moderate	Anglers	June to August	Anglers use this entire portion of the Cedar. Levels of use within this overall designation are detailed below.
Below Landsburg Dam	High	Kayak/Canoe	Spring	Site of national kayak qualifications. Also called the Slalom. High use in this designation refers to high profile but low numbers of people.

River Reach	Level of Use	User Group	Season	Key Findings
Same reach as above.	Low	Kayak/canoe	Year Round	The slalom course gets year round use.
Landsburg to Maplewood Roadside Park (Class II)	Low	Kayak/canoe	Spring through Fall; Year Round	
Same reach as above.	High	Tubers/Floaters	Summer	
Same reach as above.	Low	Anglers	June through August	Access is less good in this portion of the river for anglers.
Same reach as above.	Moderate to High	Swimmers and Waders	Summer	There are several rope swings, diving boards and swimming beaches along this reach.
Maple Valley (Highway 18/Issaquah/Hobart Road to Ron Regis Park	Moderate to High	Tubers/Floaters	Summer	Many access points along the river are provided by the Cedar River Trail, roads, bridges and railroad crossings. Cedar Grove Natural Area/Road, Maplewood Golf course, Maplewood Park and the Train bridge park in Renton at Highway 169 and Maxwell Road are noted as high use access points.
154th Place SE up river to Jones Road	Moderate to Low	Anglers	June through August	This section see the most use on the Cedar because there is a road that loops and access is easy. Approximately 100 people per day in this section.
Ron Regis Park to Carco Park	High	Tubers/Floaters	Summer	Carco is often noted as one of the highest use access points.
Carco Park to Lake Washington	Infrequent	Tubers/Floaters/Kayakers/Canoers	Year Round	

## 5.4 Green River Watershed

The Green River Watershed drains the southern portion of King County and enters Puget Sound in Elliot Bay as the Duwamish River. This river was noted by several people as the most highly used river in King County and by most as High use. Surrounded by Enumclaw, Kent, Auburn, Black Diamond and ultimately the urban portion of south Seattle, this river is tightly connected to numerous population centers. The Green River was noted as an important resource by all types of user groups and is a high profile site for safety concerns, especially around the Soos Creek area which is intermittently closed to users by the King County sheriff. One respondent brought up the use of the lower river noting Fort Dent and the possibility of high use in the lower portions of the river. No tributaries were surveyed as part of this report nor were reaches above the dam.

### 5.4.1 Green River

The Green River has high use areas for rafters, tubers, kayakers, canoers, and anglers. Flaming Geyser is commonly reported to be the highest use location on the Green and across King County. Most people appear to use the access point at the western end of Flaming Geyser State Park more so than the access point at the eastern end. Whitney Bridge at 212<sup>th</sup> Way SE is reported to be one of the highest-use take outs for inner tubers and floaters in King County. Anglers use the entire stretch from Kay's Landing to Kent. The survey yielded little information about recreational use below Kent to Puget Sound.

River Reach	Level of Use	User Group	Season	Key Findings
Headworks to Kanaskat State Park (Class II+(III))	Medium- High	Kayak/Canoe	Year round; Spring and Fall	
Tacoma Public Utilities	High	Rafters/Kayak/Canoe	Year round; especially summer for raft trips	Popular put in. Raft trips run from here to Flaming Geyser.
Bridge at Cumberland Kanaskat Road SE	Low to Moderate	Kayak/Canoe/Raft		Heavily used put in when the \$5 State Park fee was in place. Now that fee has been removed, sees less use.
Kanaskat State Park to Kay's Landing -- Upper Gorge (Class III-IV)	High	Kayak/Canoe	Spring and Fall	The Green River from Kanaskat to Flaming Geyser was reported to be the highest use stretch of river in King County.

River Reach	Level of Use	User Group	Season	Key Findings
Kanaskat Park lower access point	Low	Kayak/Canoe/Raft		Take out used if rapids are too much and people want to end their trip. Main access point is the upper.
Kay's Landing to Flaming Geyser State Park -- Lower Gorge (Class III-IV)	High	Kayak/Canoe		The Green River from Kanaskat to Flaming Geyser was reported to be the highest use stretch of river in King County.
Same reach as above.	Low	Angler	Unknown	Low use as access is limited and not good for hiking in or wading.
Flaming Geyser State Park to Kent	High	Angler	Unknown	The Green River from Kanaskat to Flaming Geyser was reported to be the highest use stretch of river in King County. Anglers put in drift boats at Flaming Geyser and high use continues all the way to Kent.
Flaming Geyser State Park	High	Swimming and wading	Summer through early Fall	The Green River from Kanaskat to Flaming Geyser was reported to be the highest use stretch of river in King County.
Same reach as above.	High	Inner Tubing and Floating	Summer through early Fall	The Green River from Kanaskat to Flaming Geyser was reported to be the highest use stretch of river in King County.
Flaming Geyser State Park to 212 Way SE Bridge/Whitney Bridge -- Yo-Yo (Class II)	High	Inner Tubing and Floating	Summer through early Fall	This stretch is considered by many to be the highest use portion for tubing use in the County, seconded by the lower Snoqualmie stretch below the Falls to Fall City.
Same reach as above.	High	Kayak, Canoe, Raft	Spring through Fall	
212 Way SE Bridge/Whitney Bridge to Soos Creek	Infrequent	Inner tubers and floater	Summer	Not used much due to tree hazards.

River Reach	Level of Use	User Group	Season	Key Findings
Same reach as above.	High	Anglers (Floating and Wading Fishermen)	Unknown	Fishermen will haul their boats out and over wood and log jams.
Soos Creek to Kent	High	Anglers	Unknown	
Kent to Puget Sound	Unknown	Unknown	Unknown	This portion of the river was not asked about nor mentioned by respondents. One person mentioned the potential use for swimmers, waders and floaters at Fort Dent and other sites in the lower Green.

## 5.5 White River Watershed

The White River originates in Pierce County and is the only glacier fed river system in King County. Its waters are extremely cold throughout the summer and have a milky white coloring that limits use for fishermen. Much of the White River portion that lies within King County has a long history of private ownership with very limited development. During the dam re-licensing process (several years ago) Puget Sound Energy opened up the ownership possibilities for these lands as the management of the dam for power production was renegotiated. These lands are reported as some of the best preserved lowland forests remaining in Puget Sound and are currently being pursued for acquisition by conservation groups. Use of the White River remains low due to difficult access and aspects of the river (cold, turbidity, lack of swimming holes and calm spots, and the history of unusual flows caused by dam management). Some believe that use of this area by boaters could increase significantly if access improves and through greater awareness of the new flow management regime. The only tributary included in this survey was the Greenwater River.

### 5.5.1 White River

The White River was noted as a very low to infrequently used river compared to the other rivers in King County. Several of the factors that have potentially kept its use levels depressed are changing which may see changes in use patterns if demand for water activities continues to grow.

River Reach	Level of Use	User Group	Season	Key Findings
Silver Springs Campground to WF White -- Upper White (Class III)	Infrequent	Kayak/Canoe	Summer	Silver Springs Campground may be in Pierce County. Huckleberry Creek is another access point within this stretch of river.
WF White to Bridge Camp/Greenwater -- Middle White (Class III)	Infrequent	Kayak/Canoe	Unknown	This stretch sees the highest use within the White River
Confluence of White River and Greenwater River to Clearwater	Low	Kayak/Canoe	Unknown	This stretch of river sees the highest use in the White River system. Still considered low relative to other rivers in King County. Clearwater Bridge used to be un-gated and now is gated which limits use.
Clearwater to the Enumclaw Buckley Bridge	Infrequent	Kayak/Canoe	Unknown	This stretch includes the diversion dam for Lake Tapps as well as Mud Mountain Dam.
Buckley to Auburn -- Lower White (Class II)	Low	Kayak/Canoe	Unknown	Access point locations need to be checked with American Rivers GPS coordinates found in Appendix I. Auburn access point is where SR-410 bridge crosses the river. Take out is near the Auburn Game Park.
Same reach as above.	Low	Angler	Unknown	

### 5.5.2 Greenwater River - Tributary to the White River

The Greenwater River forms one part of the southernmost border of King County. The Greenwater River joins the White River at the town of Greenwater where Highway 410 crosses it. Angling use is unknown. It is also unknown if organizations based out of Pierce County may use this resource more than one in King County.

River Reach	Level of Use	User Group	Season	Key Findings
FR 7030 Bridge to Highway 410/Town of Greenwater (Class II (IV))	Unknown	Unknown	Unknown	The access points need to be referenced with American River GPS locations in Appendix I and further vetted with the boating community.



## 6 Potential Next Steps

The following next steps are offered as potential pathways to creating a more complete and accurate representation of recreational river use across King County. The findings in this document are best regarded as preliminary due to the limitations associated with the timeframe and budget.

The main purpose of this first phase of work was to establish a preliminary understanding of the type, level and location of recreational use of King County's rivers. Establishing a process for validating and modifying the findings will be a critical next step to ensure the accuracy of results. Verification of the report's findings by interviewees and survey respondents is highly encouraged.

### 6.1 Additional research, survey work and outreach

- As noted above, the study approach relied on the knowledge of experts, mostly associated with active organizations. By their nature, many of these respondents represent more skilled and knowledgeable user groups. As a result, the volume of river use by casual, spontaneous users may be seriously underestimated. Field surveys of river use and rivers users in targeted areas represent prudent next steps.
- Appendix C shows a list of additional people or organizations that could be contacted as part of additional outreach and data gathering. Appendix K provides a list of entities engaged in swiftwater rescue activities that may be an excellent source for data regarding the location, number and seasonality of rescue events. Also, the number of respondents representing parks and open space staff was fairly limited. Additional interviews may yield more information about casual recreational use in particular.
- Very little information was gathered from bank fishermen or motorized boat users. Additional research of these users could be very informative. Washington State Department of Fish and Wildlife enforcement personnel may be a promising source of information.
- Information on popular river-runs and steep-creek sections can be gleaned from books and other publications regarding whitewater recreation in Washington. For example, Doug North's books *Washington Whitewater I and II* could provide a useful starting place. "Creek boating" is becoming more popular and the more esoteric runs for kayakers are covered in a book by Jeff Bennett. However, it should be noted that the smaller creeks generally fall outside of the areas of interest and management responsibility for the county's programs.

### 6.2 GIS work

The budget for this work product could not support the GIS efforts necessary to integrate the report's findings into the county's spatial data warehouse. This is a natural next step that should be completed as soon as possible. Data from other organizations – such as American Whitewater – should be integrated and cross-referenced with the county's

existing data. Inconsistent naming conventions and coordinates for identical locations should be reconciled through a collaborative effort. For example, Carco Park (also known as Renton Cedar River Park) is not how the site is referenced on King County's maps; however this is how every respondent referred to this location during the survey. The county should work with recreational use experts to identify the most informative data compilations to support a more accurate characterization of the spatial extent of recreational river use.

### **6.3 Key partnerships**

There are several key partnerships and opportunities that could benefit King County as they continue with this work.

Washington's Office of Recreation and Conservation: The RCO conducts a survey of statewide recreational use every four to five years. King County could advocate for additional segmentation of the data to better serve local information needs. This request would be consistent with the RCO's commitment to conservation and salmon recovery and may serve other counties in the future as they face similar issues and concerns.

Safety professionals: There is an extensive and highly organized network of swiftwater safety professionals in King County with access to data about rescues, calls and locations that may be of use to King County in the future.

Organized boating clubs: The Northwest has long been the leader in whitewater sports for the nation. American Whitewater, as a national conglomerate of boating organizations, and the smaller King County clubs have a wealth of information about access points, river conditions from a recreational viewpoint, and access to a large constituency. Additional time spent familiarizing the County with available information and resources from these groups could improve relationships and minimize the burden on the staff to support the County's efforts.

## **7 Appendices**

- A. Survey Form
- B. Organizations Contacted
- C. People and potential organizations to contact
- D. RCO Tables: Region, Season, Age
- E. Table of Key Reference Documents
- F. Table of Key Websites
- G. International Scale of River Difficulty: Class of River definitions
- H. List of American Whitewater Reaches and Classification
- I. List of American Whitewater Access Point Coordinates
- J. Trip schedules for Boating Clubs
- K. List of Safety Departments within King County