

2008 Programmatic Flood Risk Reduction Activities

Presented to the
Advisory Committee of the KCFCD Board
of Supervisors

October 21, 2008

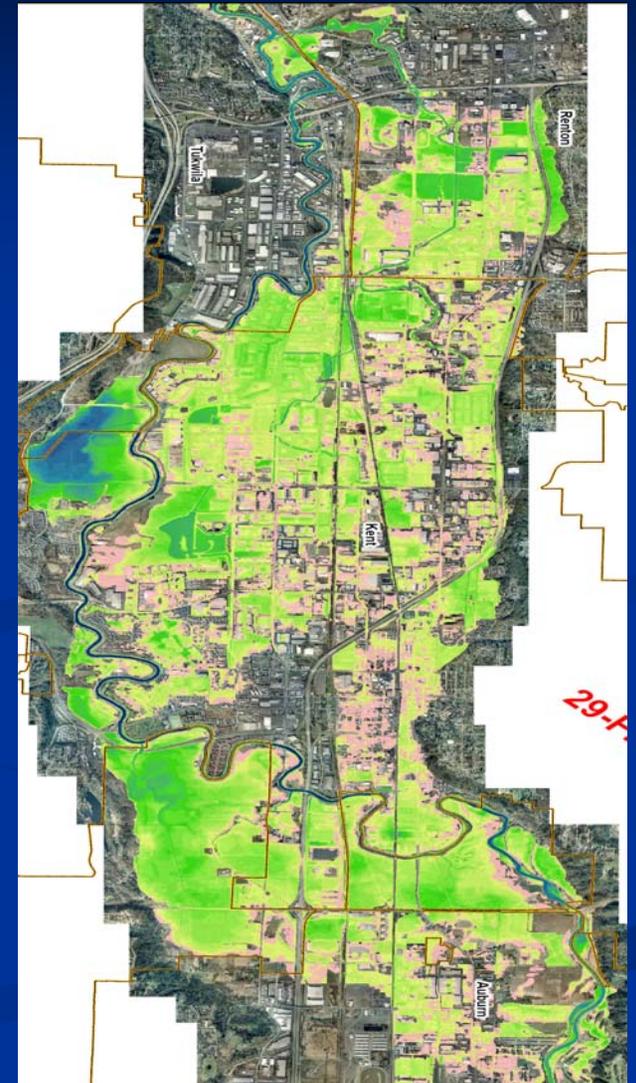
Building Partnerships: Flood Damage Repairs and the Army Corps of Engineers

- November 2006: \$33 million in repairs identified
- Leverage nearly \$20.6 million in federal funds for critical repairs at 10 sites
- Total cost of \$24.1M
- Significant real estate effort to certify ownership of 216 parcels
- Executed 9 Cooperation Agreements on behalf of the KCFCFCD
- Horseshoe Bend 205 delayed until 2009 due to limited federal funds



Floodplain Mapping and Studies

- Lower and Middle Green River Floodplain Mapping
 - Appeal submitted to FEMA Feb-March 2008
 - FEMA determination anticipated March 2009
- White River Floodplain Mapping – Oct 22 Public Meeting
- Sammamish River Floodplain Mapping
- Vashon Island Coastal Hazard Assessment
- South Fork Skykomish Channel Migration Study



Lower Green River Floodplain Mapping – submitted to FEMA in March, 2008

Maintenance and Operations: Black River Pump Station Sediment Removal Project

- Sediment accumulation in forebay.
- Two pumps (P6 and P7) require sediment removal and testing to allow for full operational capacity.
- Sediment removal completed September 2008, waiting for river to rise to run the pumps.
- Green River mapping appeal assumes operation at full pump capacity
- Plan and conduct sediment removal in front of P1.



Landowner Outreach

- Project-specific outreach regarding summer construction activities
- Public workshops and door-to-door outreach at Galli's and Dykstra levees along the Green River
- Public workshops in Snoqualmie and Skykomish
- Letter of appreciation from Kimball Creek residents

Cedar Grove Mobile Home Park

Community Assistance

- Two days of garbage removal (including some appliances)
- Removal and asbestos abatement on empty trailers.
- Removal of hazardous abandoned trailer tie-downs
- Lawn mowing and general maintenance
- Installation of gates/ bollards to cut off inappropriate access to the back of the property and river.
- Installation of additional speed bumps
- Relocation of 41 families underway – 18-24 months to complete



Community Rating System

- Class 2 community - 40% discount on flood insurance premiums in unincorporated King County floodplains
- Highest rated county in the United States
- \$410 annual savings for policy holders in floodplains
- Cities may receive credit for other King County CRS county-wide activities
- Sept 2008: Flood awareness public outreach strategy workshop with emergency management partners
- Sept 2008: Submitted annual verification report
- City of Kent now in CRS – over ½ of points received resulted from King County activities
- CRS overview at each BTC
- CRS workshop in early 2009

Grants and Agreements

- November 2008 Flood Damage Repairs
 - Federal cost-share of over \$20M
- Submitted applications for 18 grants
 - 13 awarded - \$8.1M
 - 5 pending - \$4.6M
- Two grants in development - \$3.2M
 - FEMA \$3M grant application due December 08, awards announced June 2009
 - Target acquisitions tied to capital project list (White-Greenwater, Red Creek, Elliot Bridge, Timberlane Village)

Farm/Flood Task Force

- Implementing recommendations from January 2008 task force report, and several KC Council ordinances
- Code changes
- Farm pads
- Floodproofing assistance
- Flood Prep Workshop – October 28th
- 8 of 16 recommendations implemented, remaining 8 in progress



Large Wood Placement and Public Safety

- King County Council requested DNRP develop means for addressing public safety when large wood is installed in King County's waterways.



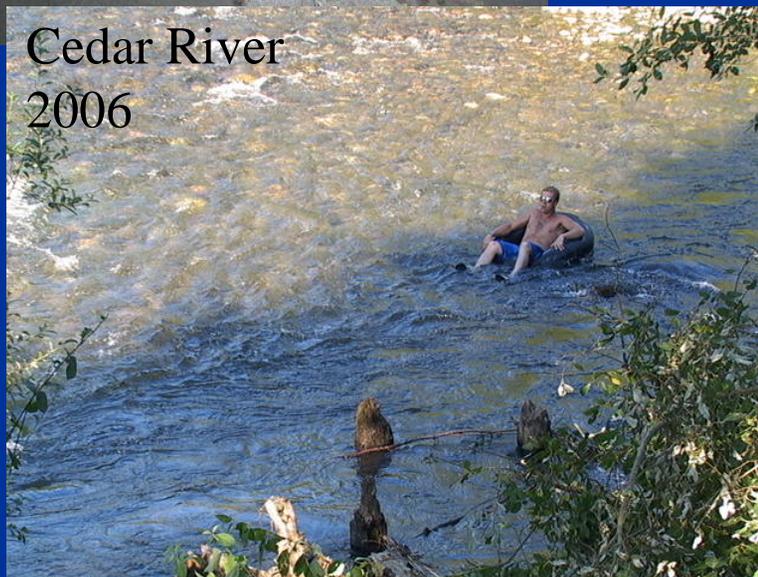
Recreational Concerns



Green River
2008

Instream wood can potentially pose a hazard to river recreationists.

- Strainers
- Sight lines
- Safe ingress, egress, portage
- Unskilled or untrained users



Cedar River
2006

To date, no injuries or fatalities from King County-installed large wood

Recommendations for Improving Public Safety in Large Wood Projects

- Adopt procedures for all King County Departments to seek input from stakeholders in design and construction of projects placing large wood in King County's rivers.
- Update Guidelines for Bank Stabilization Projects.
- Require all project applicants (including private landowners) to consider public safety in large wood installations.
- Establish clear guidance for large wood installation projects constructed under emergency authority.
- Expand public education and outreach on public projects involving wood and on recreational safety issues.

Public Education and Outreach

Living With Large Woody Debris

Boating Safety Guidelines

- Scout the condition of the river before putting in.
- Always wear a properly fitted personal flotation device.
- Be a competent swimmer.
- Know how to handle your water craft with the proper use of paddles and oars.
- Never boat beyond your skill level.
- Always stay alert for unexpected hazards.
- Never use alcohol or drugs when boating or floating in a river.
- Children should never boat or float a river without the close supervision of an adult.
- Know and practice river rescue techniques.

Why Woody Debris is Important

Fallen trees, old stumps, rootwads, and piles of branches along the edges and channel of streams and rivers are called large woody debris. Large woody debris helps to stabilize stream banks and provides vital habitat for salmon and other creatures.

To keep our rivers healthy and improve the survival of native salmon, river and habitat managers are maintaining and increasing the amounts of large woody debris in rivers and streams. Boaters and other recreation users of

Installed to reduce bank erosion

Provides food source and habitat for aquatic insects

Forms pools for juvenile fish

Creates habitat diversity

Maintains cover and refuge for juvenile fish

Project support and funding for this sign was provided by King County's Department of Natural Resources, Water and Land Resources Division and Washington State Parks and Recreation Commission Boating Programs with funds distributed through the U.S. Coast Guard. For more information please call King County at (206) 296-0510.

Produced by the Mount Commission and 501 Unit
File Name: 2009 Large Woody Debris Sign 4/07

River Safety



- Large Wood Task Force Report
- Review of capital projects under new protocols

- Removal of 3 natural hazards during 2008
- Coordinate with Sheriff's Office on closure of the Green and Cedar Rivers during May 2008 high flows

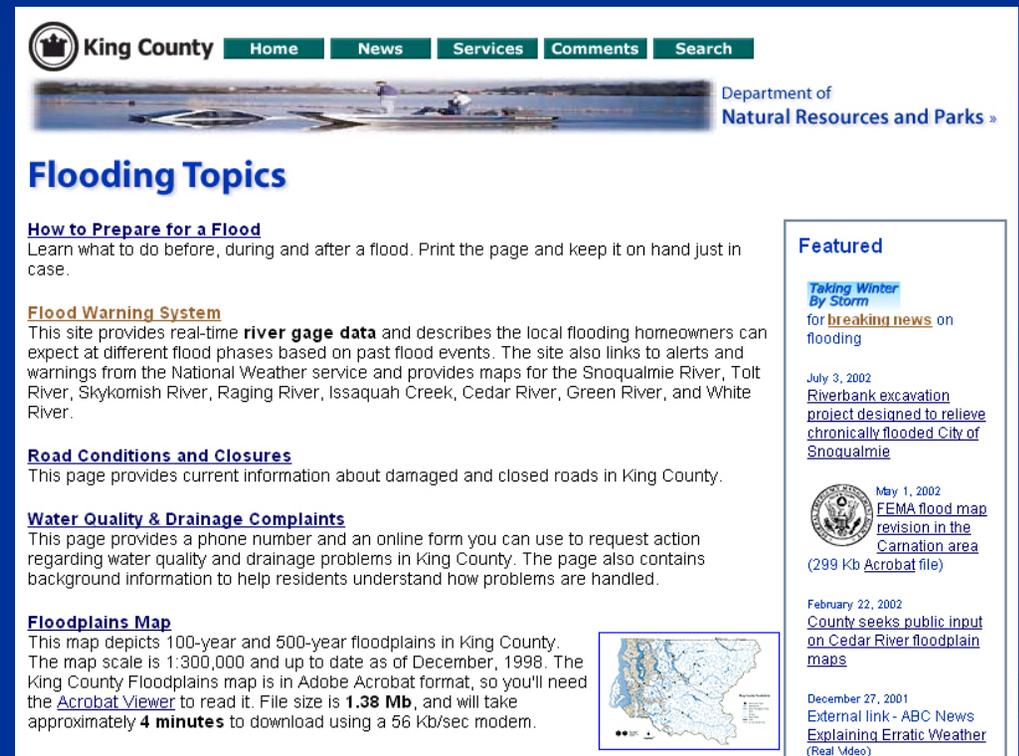


Flood Warning Center, Flood Patrol and Emergency Response

- Flood Warning Center is staffed during flood events to serve as a clearinghouse for information to first responders, the media, and the public
- Patrols inspect flood protection facilities and respond to calls on potential problems
- Emergency response is coordinated with first responders through King County Emergency Coordination Center
- Center opened in May 2008 in response to rapid snowmelt and high flows

Annual Flood Awareness Campaign

- Flood Awareness Month Announced October 3rd
- Flood Preparedness Brochures
- Direct Mailings to Repetitive Loss Properties in uninc. King County
- Media campaign
- Interagency Coordination Exercises for First Responders
- Project Impact videos
- Take Winter By Storm



King County Home News Services Comments Search

Department of Natural Resources and Parks »

Flooding Topics

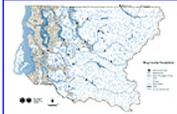
How to Prepare for a Flood
Learn what to do before, during and after a flood. Print the page and keep it on hand just in case.

Flood Warning System
This site provides real-time **river gage data** and describes the local flooding homeowners can expect at different flood phases based on past flood events. The site also links to alerts and warnings from the National Weather service and provides maps for the Snoqualmie River, Tolt River, Skykomish River, Raging River, Issaquah Creek, Cedar River, Green River, and White River.

Road Conditions and Closures
This page provides current information about damaged and closed roads in King County.

Water Quality & Drainage Complaints
This page provides a phone number and an online form you can use to request action regarding water quality and drainage problems in King County. The page also contains background information to help residents understand how problems are handled.

Floodplains Map
This map depicts 100-year and 500-year floodplains in King County. The map scale is 1:300,000 and up to date as of December, 1998. The King County Floodplains map is in Adobe Acrobat format, so you'll need the [Acrobat Viewer](#) to read it. File size is **1.38 Mb**, and will take approximately **4 minutes** to download using a 56 Kb/sec modem.



Featured

[Taking Winter By Storm](#)
for [breaking news](#) on flooding

July 3, 2002
[Riverbank excavation project designed to relieve chronically flooded City of Snoqualmie](#)

May 1, 2002
[FEMA flood map revision in the Carnation area](#)
(299 Kb [Acrobat file](#))

February 22, 2002
[County seeks public input on Cedar River floodplain maps](#)

December 27, 2001
External link - [ABC News Explaining Erratic Weather](#)
(Real Video)

Questions?

Emerging Issues

National Marine Fisheries Service
Biological Opinion: FEMA National
Flood Insurance Program

Next Steps

- Board of Supervisors Meetings
 - November 3rd Public Hearing 1:30pm
 - November 17th Budget Decisions 1:30pm
- Opportunity Fund
 - Applications due December 8th
 - ILAs 1st Quarter 2009
 - Funds transferred within 30 days of executed ILA
- 2008 Annual Report – 1Q 2008
- 2010 Work Program and Budget
 - Capital Project ‘Call for Proposals’ late November
 - Proposals due January 2009
 - BTC process Feb-May
 - Advisory Committee March-May – 1 meeting/month