

Upper Kenai River Cooperative Plan

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Introduction

The Upper Kenai River Cooperative Plan is the product of a joint effort of the Chugach National Forest, Kenai National Wildlife Refuge, Alaska Division of Parks and Outdoor Recreation, Alaska Department of Fish and Game, Kenai Peninsula Borough, Cook Inlet Region, Inc., local residents, and others interested in the future of the upper Kenai River corridor. The Plan addresses the public lands and waters within 1/4 mile of the Kenai and Russian Rivers between Kenai, Lower Russian, and Skilak Lakes.

The Upper Kenai River Cooperative Plan was developed in response to concerns about crowding, loss of fish and wildlife habitat, damage to archeological sites, and lack of a common management direction by the multiple agencies with jurisdiction in the area. The purpose of the Plan is to guide future actions of the managing agencies as we strive towards a collective vision of "desired future conditions".

The Upper Kenai River Cooperative Plan was developed using the Limits of Acceptable Change (LAC) process. LAC focuses first on identifying the resource and social conditions that people desire. Key resources are then monitored to determine when conditions are approaching unacceptable levels, and management strategies are prescribed to be implemented, if needed, to achieve desired conditions. The success of LAC is linked to public participation throughout the process. Following is a summary of the steps of the LAC process, and the public involvement opportunities and status of each step in this effort:

LAC Step	Public Involvement	Status
1. Identify issues and concerns	February 1995 workshop March 1995 six workshops August 1995 summary mailed	Completed March 1995
2. Define desired future condition (DFC)	October 1995 project update mailed; workshop April 1996 draft DFC distributed for review	Completed November 1995
3. Select indicators of resource and social conditions	October 1995 workshop April 1996 project update mailed	Completed April 1996
4. Inventory resource and social conditions	Assistance from Stream Watch and site steward volunteers	Began summer 1996; some baseline data collection needs still exist
5. Specify standards for indicators	November 1996 workshop	Completed December 1996
6. Identify management actions to achieve standards	November 1996 workshop	Completed December 1996
7. Monitor conditions	Some opportunities for assistance of volunteers in data collection	Ongoing
8. Implement management actions	Some opportunities for volunteers and partnerships	As needed when standards are exceeded

The Squalantnu Archeological District, which lies within the river corridor, will be recognized for its significance on the National Register of Historic Places. Important historic and prehistoric features will be protected from the impacts of human activities. The Squalantnu District's cultural resources will be the focus of archeological research and interpretive activities.

The Kenai and Russian Rivers will remain free flowing and will provide healthy spawning and rearing habitat for resident and anadromous fish. The sockeye salmon runs will continue to provide a sustainable and dependable fishery at historic levels. The rainbow trout population will continue to support a catch-and-release fishery. Sport fisheries targeting coho salmon and Dolly Varden will continue to be available. Riparian areas, which provide critical fisheries habitat, will only be minimally impacted by human activities. Resource management activities, including timber harvest, mining, wildlife habitat improvement, and road and trail construction, will be done in a manner that protects the water column and riparian zone.

Public access will be provided to the Kenai and Russian Rivers. Fishing opportunities will range from high density use at popular road-accessible sites to solitary use at locations that are more difficult to reach. Primary river access points on public lands will be at the outlet of Kenai Lake, the U.S. Forest Service Russian River Campground, the Kenai-Russian River Access Area (ferry and former Sportsman's Lodge site), and Jim's Landing. The sight and sounds of river users and highway travelers will be expected at primary access points. Structures and signs directing public use and providing information will be common at areas of concentrated public use and elsewhere when necessary to protect important fish and wildlife habitat or cultural resources. Uniformed agency employees responsible for visitor assistance and law enforcement will be available in concentrated use areas. Away from primary access points, people can occasionally experience isolation from the sights and sounds of others.

Use levels will increase slowly, and management actions will maintain the quality of the river experience. A portion of the use will be provided by competent river guide services. A balance between commercial and noncommercial boating will be maintained.

The Upper River area will offer a variety of opportunities for challenge and risk in a natural setting. Access in roadless areas will be self-powered and moderately challenging, although some motorized access will occur in winter. River transportation will be characterized primarily by non-motorized boating with designated zones for motorized use. Camping outside of designated campgrounds will be unobtrusive and allowed only where sensitive fish and wildlife habitats are not adversely impacted. Minimum impact fishing, camping, and human waste disposal practices will be used. Improper disposal of human waste and litter will rarely be evident.

Adequate restrooms will be provided to protect public health. Visitor facilities and administrative sites will be developed only when necessary to protect natural and cultural resources and will be designed to protect areas sensitive to human use. New facilities which are not river-dependent will be located away from the river. Designated trails will continue to provide access to popular fishing areas. New trails will be constructed only if necessary to protect fish and wildlife habitat.

An increased level of cooperation between the Chugach National Forest, Kenai National Wildlife Refuge, Alaska Division of Parks and Outdoor Recreation, and Alaska Department of Fish and Game will ensure that the agencies coordinate their management policies and actions. Rules and regulations will be kept to the minimum necessary to protect resources and minimize user conflicts. Enforcement of regulations will occur routinely. The incidence of user conflicts and illegal activities will decrease. The rights of private property owners will be respected and trespass incidents kept to a minimum.

Upper Kenai River Cooperative Plan
Indicators, Standards, Monitoring and Management Actions

Value to be Maintained or Enhanced	Key Indicator	Standard To Be Met	Monitoring Procedure and Frequency (responsible agency)	Management Action Triggered if Standard Is Not Met
Healthy Fish Populations	Sockeye escapement at Russian River weir	Minimum escapement 16,000 early run fish and 30,000 late run fish.	Install weir downstream from Lower Russian Lake from early June to early September. Annual escapement counts of early and late run sockeye salmon. (ADFG)	Restrict or close fishery as called for in the Russian River Sockeye Salmon Management Plan (05 AAC 021.0361)
	Population dynamics of Dolly Varden	Maintain historic age, size, and population of Dolly Varden	Conduct surveys to improve baseline population data. - Beginning in 1996, implant radio transmitters in Dolly Varden to describe migratory behavior and seasonal distribution. - As soon as funding is available, initiate a study to obtain baseline life history data throughout the upper Kenai River drainage. (FWS) (ADFG)	Further restriction of fishery as determined by the Bd. of Fisheries.
	Population dynamics of rainbow trout	Maintain historic age, size, and population of rainbow trout	A. Use field observations and reports from anglers to indicate when periodic surveys are needed. Compare with data from 1986, 1987, and 1995 studies. B. Conduct three to five counts of spawning rainbow trout at Russian River from mid-May to mid-June each year. (ADFG,USFS)	Continue conservative trout management as determined by the Bd. of Fisheries.

Value to be Maintained or Enhanced	Key Indicator	Standard To Be Met	Monitoring Procedure and Frequency (responsible agency)	Management Action Triggered if Standard Is Not Met
Healthy Riparian Areas	Habitat suitability on Kenai River mainstem	No net loss of habitat as a result of bank angling.	A. Survey bank from ordinary high water inland 10 ft. and ordinary high water offshore 6 ft. Record types of vegetation, cover, substrate, evidence of trampling, and human-made structures. Use HEP model to quantify habitat units. Conducted annually through 1998. Comprehensive review of program by Bd. of Fisheries after 1998. B. Conduct float surveys from mid-June to mid-August and record location and number of bank anglers. Minimum of three surveys per year through 1998. (ADFG)	Further restrictions on the sockeye salmon fishery by ADF&G as provided for in the Riparian Habitat Fishery Management Plan (05 AAC 056.0065)
	Habitat suitability on Russian River	<u>Terrestrial</u> - Plots in disturbance classes 1-3: no change in condition that results in a more degraded disturbance class. Plots in disturbance classes 4 and 5: positive change in condition. <u>Aquatic</u> - Minimum 50% overhanging bank vegetation.	Establish 15x3m permanent plots adjacent to the river. Measure percent canopy cover, percent ground cover, and percent covered by trail or trampled. Note all species present. Based on these indices, each plot is assigned a disturbance class rating. Repeat every 3 years. (USFS, FWS)	1. Improve visitor information and education materials. 2. Increase informational contacts. 3. Close heavily impacted streambank areas and/or install elevated light-penetrating walkways. 4. Revegetate closed areas where natural restoration is not occurring. 5. Increase enforcement of closures.
Water Quality	Benthic invertebrate populations	Less than 15% change in any of the following: - Number of Ephemeroptera, Plecoptera and Trichoptera (EPT) genera - Decrease in EPT/total genera ratio - Increase in Baetids/EPT ratio	Use a stovepipe sampler to collect samples at 5 locations between river miles 68 and 80. Record water flow and temperature. Sort and identify benthic invertebrates to the family level. Samples collected every two years in May. (DPOR, ADF&G, FWS)	1. Increase frequency of monitoring. 2. Educate public and property owners about materials that may be washed into the river by storm runoff or flooding. 3. Investigate cause of change. 4. Increase enforcement of water quality laws and regulations.

Value to be Maintained or Enhanced	Key Indicator	Standard To Be Met	Monitoring Procedure and Frequency (responsible agency)	Management Action Triggered if Standard Is Not Met
Healthy Wildlife Populations	Bald eagle nesting success	A. Nesting success rate and average number of eaglets per active nest not less than that recorded for the total surveyed western Kenai Peninsula nesting bald eagle population. B. Maintain historic numbers of overwintering bald eagles based on a 5-year average.	A. Conduct aerial surveys of bald eagle nests in May to determine active nests, and in June, July or August to determine eaglet productivity. Repeat annually. B. Conduct monthly surveys of overwintering bald eagles by boat or aircraft from November through March annually. (FWS)	A1. Identify cause of problem and attempt to resolve. A2. Provide information to minimize human disturbance near nests. A3. Close areas around selected nests at critical times. B1. Investigate cause of decline and attempt to resolve.
	Number of confrontations* with brown bears * "Confrontation" is defined as any bear incident involving aggression or physical contact, including "false" charges, or loss or destruction of personal property.	<u>Russian River above falls</u> No confrontations involving physical contact. <u>Russian River below falls and mainstem Kenai River</u> A. No more than 2 property confrontations per year. B. No confrontations involving aggressive behavior towards people. C. No maulings or fatalities. <u>Russian River campground</u> A. No confrontations. B. No maulings or fatalities.	Develop and promote procedure for reporting all confrontations between brown bears and humans. Record date, location, type, and known details of incidents. Investigate reported confrontations. (ADFG, FWS, USFS)	<u>Russian River above falls</u> If confrontation is likely to repeat or escalate, close area until threat is gone. <u>Russian River below falls and mainstem Kenai River</u> A. Increase information and education. B. If confrontation is likely to repeat, close area where incident occurred until threat is gone. C. Temporary closure where incident occurred; sign closure; patrol for compliance. <u>Russian River campground</u> A1. Increase education and information. A2. Institute and enforce a regulation prohibiting unattended food which is not in hard-sided containers or food storage lockers A3. Restrict camping to hard-sided RV's and trailers. A4. Install fencing around campground. B1. Temporary closure of campground; patrol for compliance; investigate incident.

Value to be Maintained or Enhanced	Key Indicator	Standard To Be Met	Monitoring Procedure and Frequency (responsible agency)	Management Action Triggered if Standard Is Not Met
Cultural Resources	Extent of human-caused damage to archeological and historic sites	A. No intentional disturbance of site. B. No mineral soil exposed as a result of foot traffic through site features or evidence of camping or campfires within features.	Monitor 12 sites to assess conditions and document changes in vegetative cover, bank erosion, presence of trash, and evidence of foot traffic. Note conditions on site maps and document with photographs. In areas of concentrated use, monitor sites annually; the remainder at 2-year intervals. (USFS, FWS, CIRD)	A1. Investigation and enforcement of ARPA violations. B1. Improve information materials and education programs. B2. Re-route trails or erect fencing to protect site features from foot traffic. B3. Develop a cultural resource management plan for the area.
Quality Recreation Experience	Accumulation of human waste and litter	No more than 6 piles of toilet paper and/or feces and less than 1/4 bucket of trash per transect.	Establish 8 transect sites. Measure sixteen 100-foot radial transects from center point. While walking each transect line, count the number of piles of toilet paper and/or human feces. Collect other litter in a 5-gal. bucket. Monitor transects annually after the second sockeye run. (FWS, USFS, DPOR)	1. Increase information and education (leave no trace techniques and location of toilet facilities). 2. Promote "pack it in/pack it out" as a voluntary program. 3. Install additional toilets at primary access points. 4. Require users to pack out solid human waste.
	Tolerance of crowding	At least 75% of the time there is at least 6 ft. between sockeye anglers in the confluence flyfishing area and 15 ft. in other areas, and at least 30 ft. between rainbow trout anglers.	Observations of distance between bank anglers recorded by staff during routine bank and float patrols. Analyze data and repeat annually. (DPOR)	1. Provide information about where and when to avoid crowds. 2. Establish fixed capacities of parking areas; no additional or overflow parking provided. 3. Restrict drop off or shuttle services for bank anglers.

Value to be Maintained or Enhanced	Key Indicator	Standard To Be Met	Monitoring Procedure and Frequency (responsible agency)	Management Action Triggered if Standard Is Not Met
Quality Recreation Experience (cont.)	Competition for fishing sites	No more than 25% of anglers surveyed had trouble finding an uncrowded fishing spot, excluding the confluence area*.	On-site survey of boat and bank anglers using a random sample design. Ask how often they had trouble finding a fishing spot and what they will tolerate. Survey repeated every 3-5 years. (DPOR)	1. Provide information advising anglers where and how to avoid crowds. 2. Establish fixed capacities of parking areas; no additional or overflow parking provided. 3. Schedule number and/or time of launches for guided trips. 4. Implement a permit system for all upper river users.
Agency Stewardship	Availability of agency staff	Minimum 8 hours/day staffing by uniformed law enforcement officers and 8 hours/day staffing by other visitor services personnel June 15-Aug. 15 at primary river access areas.	Record number of hours law enforcement officers and other agency staff are working in the area each day from mid-June through September. Tabulate annually. (DPOR, FWS, USFS)	1. Coordinate scheduling between all agencies with law enforcement jurisdiction to improve coverage. 2. Require agency personnel involved in law enforcement and visitor services to wear uniforms whenever possible. 3. Request funding for additional law enforcement personnel. 4. Expand volunteer programs, such as Stream Watch.
	Information and education for river users	At least 70% of the survey questions are answered correctly.	Random exit survey at primary access points to determine river users' knowledge of 5 categories of information: resource protection, bear safety, boating safety, fishing regulations, and area facilities. Administered annually. (USFS, FWS, DPOR)	1. Identify subject areas where answers are incorrect; improve or add outreach media or delivery to address those subjects. 2. Create a single, multi-agency source for accurate, consistent information.

* The "confluence area", for the purpose of this standard, is defined as the corridor between the power line crossing on the Russian River downstream to the power line crossing at mile 73 of the Kenai River.