

Summary of the Stehekin River Corridor Implementation Plan (SRCIP) Draft Environmental Impact Statement (DEIS)

The Stehekin River is a flood prone river because of its steep slopes, circular watershed, heavy precipitation, and long canyons that deliver massive amounts of gravel, water, and large wood to the lower valley. There is also potential for formation and sudden failure of debris dams in these canyons.

In addition to its flooding potential, the hydrology of the Stehekin River switched from a spring snowmelt system to a full rain-on-snow system in the 1970s. This switch resulted in larger and more frequent floods as warm spring rains quickly melt snow in the upper stretches of the watershed.

The purpose of the SRCIP DEIS is to address the intensified flood and erosion threats to National Park Service (NPS) facilities, private development, and natural resources within Lake Chelan National Recreation Area. Because of the current impacts and future risks associated with these unprecedented conditions, the primary purpose of this Implementation Plan is to enable the NPS to meet goals and direction provided in the 1995 *Lake Chelan National Recreation Area General Management Plan*. Goals for this plan include:

- Sustainably operate and maintain NPS facilities, public access, and campgrounds;
- Protect water quality, scenic values, habitat, and natural processes of the Stehekin River; and
- Continue visitor services provided by the Stehekin community, including those services and facilities found on private lands.

The SRCIP DEIS is needed to address several interrelated issues, including

1. Respond to the increased magnitude and frequency of flooding,
2. Implement and clarify 1995 *Lake Chelan National Recreation Area General Management Plan* guidance,
3. Sustain public facilities while protecting natural resources,
4. Manage limited funding, and
5. Respond to private land-related concerns.

The SRCIP DEIS includes an update to the 1995 Land Protection Plan to reflect new priorities for land protection and for federal land available for exchange.

The project area includes the lower Stehekin Valley, from High Bridge to the head of Lake Chelan, including Weaver Point. No actions are considered in adjacent wilderness which begins above about 1,640 feet in the lower valley. Visitor services and access to private property by Stehekin Valley residents will continue through the implementation of the SRCIP DEIS.

The SRCIP DEIS is based on thirty years of research on the Stehekin River regarding river channel morphology, logjam formation, stream flow, and use of various erosion management measures.

Four alternatives were considered with different degrees of road construction, road relocation, erosion management measures, recreational facilities, logjam manipulation, and priorities for land exchange under a revised Land Protection Plan. One alternative was designated as the Preferred Alternative.

Of the four alternatives in the SRCIP DEIS, three (including the Preferred Alternative) embrace the concept of floodplain utilization that allows water from large floods to spread out across its floodplain. This approach minimizes flood depth and damage to any one area by slowing and spreading flood water.

The SRCIP DEIS does not propose major channel dredging or levee construction because these actions are not fiscally or environmentally sustainable. The NPS and U.S. Army Corps of Engineers estimates that a one-time gravel removal in two half-mile reaches (one at the river mouth and the second at McGregor Meadows) carries a rough price of \$12 million.

The Preferred Alternative takes a sustainable approach with a long-term vision regarding the Stehekin River, the Stehekin community, and the natural and cultural resources in the valley. Many major long-term benefits would be realized under this alternative, major short-term and long-term adverse effects would be minimal.

The Preferred Alternative proposes several major changes to the future landscape of the lower valley, including relocating the Stehekin Valley Road around McGregor Meadows while still maintaining an access road to private residences. If access to private property were compromised by river encroachment, the NPS would work with private landowners on a case-by-case basis to evaluate alternative access. New land exchange priorities would favor those properties in the Stehekin River channel migration zone that are already developed.

In the Preferred Alternative, the NPS would consider the channel migration zone the effective floodplain and remove administrative facilities from it, including the maintenance facility. The roads and campgrounds would be protected at Wilson Creek, Frog Island, and Boulder Creek by new erosion management measures that involve the installation of rock barbs, logjams, and/or bioengineering.

In the Preferred Alternative, large woody debris could be manipulated within the Lake Chelan backwater zone (1/4 mile from the head of the lake up the Stehekin River) if it posed a threat to the Stehekin Valley Road or water quality due to exclusive flooding of septic systems. Under certain conditions, large woody debris from the tops of some logjams in this zone could also be used by private landowners for agency-permitted erosion-protection measures.

The Preferred Alternative would make several new recreational opportunities available to the public, including a new raft take-out at the river mouth, a new campground at Rainbow Falls, a relocated Bullion Campground, and a Lower Valley Trail to connect the Stehekin Landing to High Bridge. The Lower Valley Trail would also be connected to the Stehekin River Trail via a footbridge near Boulder Creek. The shooting range would be closed and restored to its native state, no replacement would be constructed.