As of March, 1993, 34 gravel bars had approved status for extraction. However, because of federal regulations and decreasing seasonal windows in which gravel could be removed from the river due to impacts to riparian habitat and endangered salmon spawning and habitat, there has not been any river bar scalping on the Nooksack River since 1995.

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The benefits of river bar scalping are local and it may have negative effects in areas surrounding the mining site. For example, if done improperly gravel removal can de-stabilize the river channel locally and increase, rather than decrease, flood damage downstream. After intensive bar scalping, floodwater that is normally stored on the floodplain of the mined reach can be concentrated and dumped on the reach immediately downstream.

If gravel mining exceeds the rate of replenishment from upstream, the river bed may lower both upstream and downstream; this bed degradation can undermine bridge supports and other structures, cause adjacent banks to erode (or stabilize, depending on how much and where gravel is removed), lower groundwater tables adjacent to the river, and damage riparian vegetation.

Improper mining methods in fish spawning reaches can de-stabilize spawning gravel or clog it with silt, remove cover vegetation or trap smolts during outmigration. Over harvesting of gravel can erode the river bed and expose the underlying substrate, reducing or eliminating pool and riffle habitat for fish and other aquatic animals. Finally, petroleum spills from mining equipment can degrade local surface water quality if not responded to properly.

While river gravel is a resource that could extend the life of other Whatcom County gravel resources, river bars are not a reliable source from year to year. The amount of gravel that can be mined varies with seasonal and yearly rates of gravel deposition; high and low water levels and timing; and fish migration, spawning and out-migration timing.

Various costs raise the price of river bar gravel. For example, there are several streams (e.g. Boulder Creek, Porter Creek, Glacier Creek, etc.) which may offer significant quantities of sand and gravel, but which are not currently being mined due to prohibitive transportation costs. Other factors include the cost and limited availability of access easements to the river, the repeated handling that is necessary for extraction and processing of the material, and the cost of complying with regulations.

Finally, many state and federal regulations restrict scalping locations and practices. The cost and time delay of duplicate regulation, environmental restrictions, royalty charges and the regulatory process are deterrents to river bar mining.

Goal 8Q: Subject to Federal and State regulations, support the extraction of gravel from river bars and stream channels in Whatcom County for flood control purposes and market demands where adverse hydrologic and other environmental effects are avoided or minimized.

Policy 8Q-1: Designate river gravel as a supplemental source to upland reserves.

Policy 8Q-2: Allow, when appropriate, the stockpiling, screening, and washing of river gravel in all zone districts when associated with river gravel extraction as close to the extraction site as possible to keep handling and transportation costs to a minimum.

Policy 8Q-3: Design river gravel extraction to work with natural river processes so that no adverse flood, erosion, or degradation impacts occur either upstream or downstream of extraction sites. Base mining extraction amounts, rates, timing, and locations on a scientifically determined sediment budget adjusted periodically according to data provided by a regular monitoring plan.

Policy 8Q-4: Locate and operate river gravel extraction to provide long-term protection of water quality and quantity, fish and wildlife populations and habitat, and riparian vegetation.

Policy 8Q-5: Plan and conduct operations on rivers and streams so that short- and long-term impacts and hazardous conditions are either prevented or held to minimum levels that are not harmful to the general public. Create as little adverse impact on the environment and surrounding uses as possible.

Policy 8Q-6: Fully consider the recommendations of the Flood Hazard Management Committee to encourage gravel bar scalping that decreases the likelihood of flooding and lowers the costs of flood damage and repair, flood management, and emergency services.

Policy 8Q-7: Support the use of gravel from tributary streams for flood hazard control, provided environmental impacts are fully addressed.

Policy 8Q-8: Support the use of existing public access easements to allow gravel removal.

Policy 8Q-9: Work with other jurisdictions and related agencies to reduce or eliminate redundant regulations, streamline the permitting process, and provide greater opportunities for appropriate river gravel extraction to enhance other important resources, specifically agricultural.

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Use of mineral resource lands can impact habitat, including riparian areas, stream flows, channel habitat structure, and water quality.

Goal 8S: Ensure that mining avoids adverse impacts to the habitat of threatened and endangered fish and wildlife species.

Policy 8S-6: Work with state and federal agencies to develop policies and regulations regarding in-stream gravel extraction to ensure that protected species, essential fish habitat, or other critical areas are not adversely impacted and that flooding or erosion in surrounding areas is not increased.

Policy 8S-7: Avoid river bar scalping where it would adversely affect spawning salmon or critical habitat areas.